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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

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m-Chloroacetylaminophenone:

(JACOBS and HEIDELBERGER)

1915, 21, 140

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 141

ω-Chloroacetylaminophenone:

(JACOBS and HEIDELBERGER)

1915, 21, 472

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1915, 21, 472

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1915, 21, 118

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

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1915, 21, 124

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(JACOBS and HEIDELBERGER)

1915, 21, 122

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1915, 21, 123

***p*-Chloroacetylaminobenzene-azodipropylaniline:**

(JACOBS and HEIDELBERGER)

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Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 125

***p*-Chloroacetylaminobenzene-azoethylbenzylaniline:**

(JACOBS and HEIDELBERGER)

1915, 21, 126

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 127

***p*-Chloroacetylaminobenzoic acid:**

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1915, 21, 139

— —, hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 140

***p*-Chloroacetylaminobenzoic acid—continued:**

Ethyl ester, hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 139

***o*-Chloroacetylaminobenzyl alcohol:**

(JACOBS and HEIDELBERGER)

1915, 21, 138

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 138

***o*-Chloroacetylaminobenzyl benzoate:**

(JACOBS and HEIDELBERGER)

1915, 21, 139

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 139

 β -Chloroacetylamino- γ -butanol:

(JACOBS and HEIDELBERGER)

1915, 21, 428

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 429

 δ -Chloroacetylamino-*n*-butanol:

(JACOBS and HEIDELBERGER)

1915, 21, 427

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 427

 β -Chloroacetylamino- γ -butyl *p*-nitrobenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 429

**β -Chloroacetylaminog- γ -butyl
p-nitrobenzoate—continued.**

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)

1915, 21, 429

**δ -Chloroacetylaminobutyl
p-nitrobenzoate:**

(JACOBS and HEIDELBER-
GER)

1915, 21, 428

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)

1915, 21, 428

***p*-Chloroacetylaminodiethylan-
iline:**

(JACOBS and HEIDELBER-
GER)

1915, 21, 115

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)

1915, 21, 115

***m*-Chloroacetylaminodimethyl-
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GER)

1915, 21, 113

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)

1915, 21, 113

***p*-Chloroacetylaminodimethyl-
aniline:**

(JACOBS and HEIDELBER-
GER)

1915, 21, 114

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)

1915, 21, 114

***p*-Chloroacetylaminodipropyl-
aniline:**

(JACOBS and HEIDELBER-
GER)

1915, 21, 116

***p*-Chloroacetylaminodipropyl-
aniline—continued:**

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)

1915, 21, 116

Chloroacetylamin ethanol:

(JACOBS and HEIDELBER-
GER)

1915, 21, 407

**Chloroacetylamin ethyl acetyl-
salicylate:**

(JACOBS and HEIDELBER-
GER)

1915, 21, 414

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)

1915, 21, 414

Chloroacetylamin ethyl

***p*-aminobenzoate:**

(JACOBS and HEIDELBER-
GER)

1915, 21, 412

**Chloroacetylamin ethyl ani-
sate:**

(JACOBS and HEIDELBER-
GER)

1915, 21, 414

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)

1915, 21, 415

Chloroacetylamin ethyl

***p*-(azodiethylaniline)-ben-
zoate:**

(JACOBS and HEIDELBER-
GER)

1915, 21, 413

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)

1915, 21, 413

**Chloroacetylamin ethyl benzo-
ate:**

(JACOBS and HEIDELBER-
GER)

1915, 21, 408

Chloroacetylaminioethyl benzoate—continued:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 408

***p*-Chloroacetylaminioethyl benzylaniline:**

(JACOBS and HEIDELBERGER)

1915, 21, 117

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 117

Chloroacetylaminioethyl cinnamate:

(JACOBS and HEIDELBERGER)

1915, 21, 415

Chloroacetylaminioethyl ether:

(JACOBS and HEIDELBERGER)

1915, 21, 415

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 416

Chloroacetylaminioethyl***p*-methoxybenzoate:**

(JACOBS and HEIDELBERGER)

1915, 21, 414

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 415

Chloroacetylaminioethyl **β -naphthoate:**

(JACOBS and HEIDELBERGER)

1915, 21, 410

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 410

Chloroacetylaminioethyl *m*-nitrobenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 411

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 411

Chloroacetylaminioethyl***o*-nitrobenzoate:**

(JACOBS and HEIDELBERGER)

1915, 21, 410

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 410

Chloroacetylaminioethyl***p*-nitrobenzoate:**

(JACOBS and HEIDELBERGER)

1915, 21, 411

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 412

Trimethylamine salt (JACOBS and HEIDELBERGER)

1915, 21, 412

Chloroacetylaminioethyl *o*-toluate:

(JACOBS and HEIDELBERGER)

1915, 21, 409

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 409

Chloroacetylaminioethyl *p*-toluate:

(JACOBS and HEIDELBERGER)

1915, 21, 409

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 409

Chloroacetylaminooethyl *o*-tolyl ether:

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1915, 21, 417

Chloroacetylaminoisopropanol:

(JACOBS and HEIDELBERGER)

1915, 21, 424

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 425

Chloroacetylaminoisopropyl *p*-nitrobenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 425

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 425

***p*-Chloroacetylaminoleucomalachite green:**

(JACOBS and HEIDELBERGER)

1915, 21, 141

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 141

Chloroacetylaminomethyl anisate:

(JACOBS and HEIDELBERGER)

1915, 21, 406

***m*-Chloroacetylaminomethylbenzamide:**

(JACOBS and HEIDELBERGER)

1915, 20, 694

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 20, 694

Chloroacetylaminomethyl benzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 406

***m*-Chloroacetylaminomethylbenzoic acid:**

Diethylaminoethyl ester (JACOBS and HEIDELBERGER)

1915, 20, 693

— —, hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 20, 694

Ethyl ester, hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 20, 692

***m*-Chloroacetylaminomethylbenzoyl chloride:**

(JACOBS and HEIDELBERGER)

1915, 20, 693

 α -Chloroacetylaminobutanol:

(JACOBS and HEIDELBERGER)

1915, 21, 430

 γ -Chloroacetylaminobutanol:

(JACOBS and HEIDELBERGER)

1915, 21, 431

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 431

Chloroacetylaminomethyl *p*-methoxybenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 406

Chloroacetylaminomethylmethylethyl carbinol:

(JACOBS and HEIDELBERGER)

1915, 21, 430

Chloroacetylaminomethylmethylethyl carbinol—continued:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 430

 γ -Chloroacetyl-amino- β -pentanol:

(JACOBS and HEIDELBERGER)

1915, 21, 429

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 430

***m*-Chloroacetylaminophenol:**

(JACOBS and HEIDELBERGER)

1915, 21, 132

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 133

***o*-Chloroacetylaminophenol:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 131

***o*-Chloroacetylaminophenyl benzoate:**

(JACOBS and HEIDELBERGER)

1915, 21, 131

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 131

***p*-Chloroacetylaminophenyl chloroacetate:**

(JACOBS and HEIDELBERGER)

1915, 21, 134

***o*-Chloroacetylaminophenyl *p*-nitrobenzoate:**

(JACOBS and HEIDELBERGER)

1915, 21, 132

***o*-Chloroacetylaminophenyl *p*-nitrobenzoate—continued:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 132

 γ -Chloroacetylaminopropyl anisate:

(JACOBS and HEIDELBERGER)

1915, 21, 423

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 424

 γ -Chloroacetylaminopropyl *p*-methoxybenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 423

 γ -Chloroacetylaminopropyl *p*-nitrobenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 423

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 423

6-Chloroacetylaminquinoline:

(JACOBS and HEIDELBERGER)

1915, 21, 143

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 143

Hydrochloride (JACOBS and HEIDELBERGER)

1915, 21, 143

***o*-Chloroacetyl-amino-*p'*, *p''*-tetraethyldiaminotriphenylmethane:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 142

***p*-Chloroacetylamino-*p'*, *p''*-tetraethyldiaminotriphenylmethane:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 142

Chloroacetylaniline:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 104

Chloroacetyl- ω -anilinoacetophenone:

(JACOBS and HEIDELBERGER)
1915, 21, 106

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 107

Chloroacetyl-*o*-anisidine:

(JACOBS and HEIDELBERGER)
1915, 21, 134

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 135

Chloroacetyl-*p*-anisidine:

(JACOBS and HEIDELBERGER)
1915, 21, 137

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 138

Chloroacetyl- ω , *o*-anisidinoacetophenone:

(JACOBS and HEIDELBERGER)
1915, 21, 137

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 137

Chloroacetylbenzylamine:

(JACOBS and HEIDELBERGER)
1915, 20, 686

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 20, 686

Chloroacetylbenzylurea:

(JACOBS and HEIDELBERGER)
1915, 21, 152

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 152

Chloroacetylbis-(*p*-dimethylaminophenyl)-methylamine:

(JACOBS and HEIDELBERGER)
1915, 21, 472

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 473

Chloroacetyl-*o*-chloroaniline:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 110

Chloroacetyl- ψ -cumidine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 109

Chloroacetyl-*p*-dimethylaminophenylaminoethanol:

(JACOBS and HEIDELBERGER)
1915, 21, 420

Chloroacetyldiphenylamine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)
1915, 21, 105

Chloroacetylethylaminoethanol:

(JACOBS and HEIDELBERGER)

1915, 21, 417

Chloroacetylethylaminoethyl *p*-nitrobenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 417

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 418

Chloroacetylleucoauramine:

(JACOBS and HEIDELBERGER)

1915, 21, 472

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 473

Chloroacetylmethylaniline:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 105

Chloroacetyl-*o*-methylbenzylamine:

(JACOBS and HEIDELBERGER)

1915, 20, 686

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 20, 686

Chloroacetylmethylurea:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 151

Chloroacetyl- α -naphthylamine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 109

Chloroacetyl- β -naphthylamine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 109

Chloroacetylnovocain

(JACOBS and HEIDELBERGER)

1915, 21, 139

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 140

Chloroacetyloxyethylanisate:

(JACOBS and HEIDELBERGER)

1915, 21, 471

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 471

Chloroacetylphenylaminoethanol:

(JACOBS and HEIDELBERGER)

1915, 21, 418

Chloroacetylphenylaminoethyl *p*-nitrobenzoate:

(JACOBS and HEIDELBERGER)

1915, 21, 418

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 419

 β -Chloroacetyl- α,α -phenylbenzylhydrazine:

(JACOBS and HEIDELBERGER)

1915, 21, 474

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 475

Chloroacetylphenylglycinanilide:

(JACOBS and HEIDELBERGER)

1915, 21, 106

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 106

Chloroacetyl-*m*-toluidine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 108

Chloroacetyl-*o*-toluidine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 107

Chloroacetyl-*p*-toluidine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 108

Chloroacetyltriphenylmethyamine:

(JACOBS and HEIDELBERGER)

1915, 21, 473

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 474

Chloroacetylurea:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 151

Chloroacetylurethane:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 152

Chloroacetyl-*m*-4-xyloidine:

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 21, 109

 α -Chlorobenzalhydantoin

(WHEELER, HOFF and JOHNSON)

1911-12, 10

***o*-Chlorobenzoic acid:**

Oxidation with hydrogen peroxide (DAKIN HERTER)

1907, 3

***o*-Chlorobenzyl chloride:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 20

***p*-Chlorobenzyl chloride:**

Hexamethylenetetraminium salt (JACOBS and HEIDELBERGER)

1915, 20

Chloroform:

Acetonuria following anesthesia by (BALDWIN)

1905-06, 1

Autolysis, effect on (WELLS and BENSON)

1907,

(BENSON and WELLS)

1910-11,

Blood fat, influence of (BLOOR)

1914, 1

Cell division, influence of (LOEB and WASTENHOF)

1913, 14

(LILLIE)

1914, 17

Morphological changes, relation of hydrochloric acid to (GRAHAM)

1915, 20

Necrosis of liver, chemistry of (WELLS)

1908-09, 5

Nylander's reaction, influence on (REHFUSS and HAWK)

1909-10, 7

Chloroform—continued:

Oxidation in sea urchin's
eggs, effect on rate of
(LOEB and WASTENEYS)
1913, 14, 521

Papain, action on (MEN-
DEL and BLOOD)
1910-11, 8, 184

Reductase, action on (HAR-
RIS and CREIGHTON)
1915, 22, 538

Chloromethylanisic acid:

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)
1915, 20, 682

Methyl ester, hexamethyl-
enetetraminium salt (JA-
COBS and HEIDELBER-
GER) 1915, 20, 683

**Chloromethyl-*p*-cresotonic
acid:**

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)
1915, 20, 681

**5-Chloromethylsalicylalde-
hyde:**

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)
1915, 20, 683

Chloromethylsalicylic acid:

Hexamethylenetetramin-
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— oil, effect of (OSBORNE and MENDEL)
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Calcium lactate, (HART and McCOLLUM)
1914
Capacity of (OSBORNE and MENDEL)
1914,
1915

Growth—continued:

Casein, effect of (HART
and McCOLLUM)
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—, — — varying amounts
of (OSBORNE and MEN-
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SON)
1916, 24, 364

Cereal grains proteins, ef-
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1914, 19, 323

Chemical constituents of
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1916, 25, 630

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ling mice, when fed to
mother (ROBERTSON
and CUTLER)
1916, 25, 663

—, — — white mouse
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Cod liver oil, effect of
(OSBORNE and MEN-
DEL)
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Corn, effect of (HART,
HUMPHREY, and MORRI-
SON)
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(HART and McCOLLUM)
1914, 19, 373

— oil, effect of (HART and
McCOLLUM)
1914, 19, 385

Corpus luteum substance,
effect of (PEARL)
1916, 24, 123

Growth—continued:

Cottonseed meal, effect of
(RICHARDSON and
GREEN)
1916, 25, 307

— — and milk powder,
effect of (RICHARDSON
and GREEN)
1916, 25, 313

— oil, effect of (McCOL-
LUM and DAVIS)
1915, 20, 643

Creatine content of mus-
cle, effect on (MYERS
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1913-14, 16, 433;

1914, 17, 342, 404;

1914, 18, 104;

1915, 20, 370, 385;

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1915, 23, 454;

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(McCOLLUM and DA-
VIS)

1914, 19, 247;

1915, 20, 418, 649;

1915, 21, 182, 626;

1915, 23, 195,

235, 253

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1915, 23, 417

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1916, 24, 368

(McCOLLUM, SIMMONDS,
and PITZ)

1916, 25, 115

(HART, MILLER, and
McCOLLUM)

1916, 25, 250

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GREEN) 1916, 25, 316

Growth—continued:

- Desiccated milk in (McCOLLUM and HART)
1912, 11, xvi
- Diet, essential factors in,
during (McCOLLUM and DAVIS)
1915, 23, 231
- Edestin, effect of varying
amounts of (OSBORNE
and MENDEL)
1915, 20, 352
- Egg powder, effect of (McCOLLUM and DAVIS)
1915, 20, 415
- yolk, effect of (McCOLLUM and DAVIS)
1914, 19, 390
- — fat, effect of (OSBORNE and MENDEL)
1913-14, 16, 432;
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- Fat-free food, effect of
(OSBORNE and MENDEL)
1912, 12, 81
- Fats, natural, effect of
(OSBORNE and MENDEL)
1915, 20, 379
- Ferments, burley tobacco,
effect on (OOSTHUIZEN
and SHEDD)
1913-14, 16, 439
- Fibrinolysins and (FLEISHER and LOEB)
1915, 21, 501
- Food intake, relation to
(OSBORNE and MENDEL)
1915, 20, 357
- Fungi, magnesium and
phosphorus, relation of
(REED)
1909, 6, xxiii

Growth—continued:

- Gliadin and lysine, effect
of (OSBORNE and MENDEL)
1914, 17, 332
- Glutelin of maize, effect
of (OSBORNE and MENDEL)
1914, 18, 12
- Histidine, effect of (OSBORNE and MENDEL)
1914, 18, 11
- Kidney fat, effect of (McCOLLUM and DAVIS)
1915, 20, 644
- Lactalbumin, effect of
varying amounts of (OSBORNE and MENDEL)
1915, 20, 352
- Lard, effect of (OSBORNE and MENDEL)
1914, 17, 402;
1915, 20, 380
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1914, 19, 394
- Lecithin, effect on white
mice (ROBERTSON)
1916, 25, 647
- , — — suckling mice,
when fed to mother
(ROBERTSON and CUTLER)
1916, 25, 663
- Legumin of vetch, effect
(OSBORNE and MENDEL)
1914, 18, 1
- Lipoids and (McCOLLUM and DAVIS)
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- Lysine, rôle of (OSBORNE and MENDEL)
1914, 17, 332
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- Maintenance and (OSBORNE and MENDEL)
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Meat scrap, effect of
(HART, MILLER, and
McCOLLUM)

1916, 25, 247

Milk, artificial protein-
free, effect of (OSBORNE
and MENDEL)

1913, 15, 315

—, centrifugated, effect of
(OSBORNE and MENDEL)

1913-14, 16, 426

— proteins and (McCOL-
LUM)

1914, 19, 323

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VIS) 1915, 20, 415

Mineral content of ration,
effect of (McCOLLUM
and DAVIS)

1913, 14, xl;

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Nitrogen of alfalfa hay
and corn, efficiency of
(HART, HUMPHREY, and
MORRISON)

1912-13, 13, 133

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1916, 24, 363

Oats and wheat, compara-
tive value of (McCOL-
LUM) 1912, 11, xv

Oil meal, effect of (HART
and McCOLLUM)

1914, 19, 386

Olive oil, effect of (Mc-
COLLUM and DAVIS)

1914, 19, 246;

1915, 20, 643

Phaseolin, effect of (Os-
BORNE and MENDEL)

1914, 18, 14

Phospholipoid content of
tissues, changes in, dur-
ing (ROBERTSON)

1916, 24, 379

Growth—continued:

Pituitary body, effect of
(ROBERTSON)

1916, 24, 385

— substance, effect of
(PEARL)

1916, 24, 123

Planarian worm, pituitary
gland, effect of (WUL-
ZEN) 1916, 25, 625

Problems of (OSBORNE
and MENDEL)

1914, 17, xxiii

Process, nature of (ROB-
ERTSON)

1916, 24, 363

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tritive value of (Os-
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1914, 18, 1

— intake, plane of, effect
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1914, 19, 323

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1915, 20, 415

— minimum and (JAN-
NEY)

1915, 20, 340

—, rôle of (OSBORNE and
MENDEL)

1912, 11, xxii

Purified food substances
and (McCOLLUM and
DAVIS)

1915, 20, 641

Restricted rations, effect
of (HART and McCOL-
LUM)

1914, 17, xlv

Resumption of, after long
continued failure to
grow (OSBORNE and
MENDEL)

1915, 23, 439

Growth—continued:

- Rice plant, hydrochloric acid, effect of (MIYAKE) 1916, 25, 26
- —, salts, effect of (MIYAKE) 1913-14, 16, 235
- —, toxic action of aluminium salts (MIYAKE) 1916, 25, 23
- Salts, effect of (HART, MILLER, and McCOLLUM) 1916, 25, 245
- Substance in butter fat promoting growth, stability of (OSBORNE and MENDEL) 1916, 24, 37
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- Suppression of (OSBORNE and MENDEL) 1914, 18, 95
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- Tethelin, effect of (ROBERTSON) 1916, 24, 397
- Thymus, changes in, during (ROBERTSON) 1916, 24, 377
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- Tryptophane, rôle of (OSBORNE and MENDEL) 1916, 25, 1
- Vegetable diet, effect of (HART and McCOLLUM) 1916, 24, xxviii
- fats, effect of (McCOLLUM and DAVIS) 1915, 21, 179

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- Wheat, effect of and McCOLLUM 1914,
- embryo, effect COLLUM and DAVIS 1915,
- 1915,
- 1915,
- (McCOLLUM, SIMMONS, and PITZ) 1916,
- proteins, effect COLLUM and DAVIS 1915,
- Yeast, effect of and MACALLUM 1915,
- Zein, tryptophane sine, effect of (FUNK and MENDEL) 1914,
- Guaiacum:**
- Peroxidase reaction with milk and (KASPER and PORCH) 1908
- Guanase:**
- Chimpanzee (WELLS and CALDWELL) 1914,
- Fetus, human (WELLS and CORPER) 1909
- Monkey tissue (WELLS) 1909-10
- Muscle, ox (LEONARD and JONES) 1909
- Opossum (CALDWELL and WELLS) 1914,
- Orang utan (WELLS and CALDWELL) 1914,
- Pancreas, pig's (JONES and WELLS) 1911

Guanase—continued:

Placenta (WELLS and CORPER)

1909, 6, 480

Rat tissue (ROHDE and JONES)

1909-10, 7, 242

Spleen, dog's (CORPER)

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Yeast (STRAUGHN and JONES)

1909, 6, 249

Guanidine:

Arginase, action on derivatives of (DAKIN)

1907, 3, 435

Ninhydrin reaction negative (HARDING and MACLEAN)

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Picrolonates of derivatives of (WHEELER and JAMIESON)

1908, 4, 111

Sulfate, preparation (LEVENE and SENIOR)

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Urine after parathyroidectomy, isolation from (KOCH)

1913, 15, 55

Guanine:

Aralia cordata shoots, presence in (MIYAKE)

1915, 21, 507

Guanylic acid of spleen, preparation from (JONES and ROWNTREE)

1908, 4, 293

Liver of *Python reticulatus*, isolation from (LYMAN)

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Metabolism (MENDEL and LYMAN)

1910-11, 8, 121

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1914, 17, 41

Guanine—continued:

Monkey urine, content of (HUNTER)

1914, 18, 112

Muscle content (BENNETT)

1912, 11, 221

Pancreas, pig's, action of (JONES)

1911, 9, 135

Placenta content (WELLS and CORPER)

1909, 6, 479

Spleen content (CORPER)

1912, 11, 32

Thymus nucleic acid, content of (JONES and AUSTRIAN)

1907, 3, 4

Yeast nucleic acid, isolation from, on partial enzymatic hydrolysis (JONES and RICHARDS)

1914, 17, 78

Guanine cytosine dinucleotide:
(JONES and RICHARDS)

1915, 20, 30

Guanine hexoside:

Thymus nucleic acid, isolation from (LEVENE and JACOBS)

1912, 12, 377

Guanosine:

Nitrous acid, reaction with (VAN SLYKE)

1911, 9, 195

Yeast nucleic acid, formation from, by enzymes (AMBERG and JONES)

1912-13, 13, 445

(JONES and RICHARDS)

1914, 17, 78

Guanylase:

Spleen, ox, presence in (JONES)

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- Barium salt (LEVENE and JACOBS)
1912, 12, 425
- Brucine salt (LEVENE and JACOBS)
1912, 12, 424
- Gastric juice, action of (LEVENE and MEDIGRECEANU)
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- Intestinal juice, action of (LEVENE and MEDIGRECEANU)
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- mucosa extract, action of (LEVENE and MEDIGRECEANU)
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- Kidney plasma, action of (LEVENE and MEDIGRECEANU)
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- Liver plasma, action of (LEVENE and MEDIGRECEANU)
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- Organism, distribution in (JONES and ROWNTREE)
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- Ox spleen, action of (JONES)
1911, 9, 134
- Pancreas, pig's, action of (JONES)
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- Pancreatic juice, action of (LEVENE and MEDIGRECEANU)
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Guanylic acid—cont:

- Pancreatic plas
of (LEVENE and
GRECEANU)
1911,
Spleen, action
and ROWNTREE
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Triphosphonucle
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and GERMAN
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- Invertase conte
EWS and GL
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- Amino-acid c
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ERFORD and
1911,

Halogen:

- Tissue enzyme
celerator of (J
1911,

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- Indole content
1911,

Heart:

- Growth, influen
ing on (McC
DAVIS) 1911,

Heart—continued:

Isolated mammalian, action of blood proteins on (GORHAM and MORRISON)

1909-10, 7, xviii

Muscle, lipoid content (ROSENBLOOM)

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— plasma, guanylic acid, action on (LEVENE and MEDIGRECEANU)

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— —, inosin, action on (LEVENE and MEDIGRECEANU)

1911, 9, 67

— —, inosinic acid, action on (LEVENE and MEDIGRECEANU)

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— —, pyrimidine nucleotide, action on (LEVENE and MEDIGRECEANU)

1911, 9, 398

— —, thymus nucleic acid, action on (LEVENE and MEDIGRECEANU)

1911, 9, 402

— —, yeast nucleic acid, action on (LEVENE and MEDIGRECEANU)

1911, 9, 69, 400

Tissue, urea content (MARSHALL and DAVIS)

1914, 18, 60

Heat:

Arabinose, effect on (HENDERSON)

1911-12, 10, 6

Bence-Jones protein, reaction of (TAYLOR and MILLER)

1916, 25, 282

Glucose, effect on (HENDERSON)

1911-12, 10, 3

Heat—continued:

Muscle, effect on (MEIGS)

1909, 6, xviii

Pancreas powder, effect on activity of (LOEVENHART)

1906-07, 2, 451

Peroxidase activity of milk, influence on (KASTLE and PORCH)

1908, 4, 311

Phytase, destruction by (ANDERSON)

1915, 20, 490

Reductase, action on (HARRIS and CREIGHTON)

1915, 21, 303

Yeast enzyme, effect on (KOELKER)

1910-11, 8, 169

Heat production:

Alanine, effect of (LUSK)

1915, 20, 560

Athletes (BENEDICT and SMITH)

1915, 20, 246

Body composition and (BENEDICT)

1915, 20, 279

— surface and (BENEDICT)

1915, 20, 274

— weight and (BENEDICT)

1915, 20, 270

Carbohydrate conversion into fat (LUSK)

1915, 20, 581

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1913, 15, 380

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1915, 20, 600

Glucose and alanine, effect of (LUSK)

1915, 20, 584

—, effect of (LUSK)

1915, 20, 575

Heat production—continued:

Glucose and glycocoll, effect of (LUSK)

1915, 20, 584

Glycocoll, and alanine, effect of (LUSK)

1915, 20, 560

—, effect of (LUSK)

1915, 20, 560

Hydrazine, effect of (UNDERHILL and MURLIN)

1915, 22, 499

Menstruation, effect of (LUSK)

1915, 20, 562

Non-vegetarians (BENEDICT and ROTH)

1915, 20, 233

Normal individuals (BENEDICT and EMMES)

1915, 20, 253

Vegetarians (BENEDICT and ROTH)

1915, 20, 233

Heat of reaction:

Direct determination (HENDERSON and RYDER)

1907, 3, xvii

Hemagglutinin:

Autolysis and (SCHNEIDER)

1912, 11, 53

Beans, hemagglutinating properties of (SCHNEIDER)

1912, 11, 47

Food for seedlings (SCHNEIDER)

1912, 11, 55

Hemocyanin:

Amino-acids of (VAN SLYKE)

1911-12, 10, 50

Amino nitrogen content (VAN SLYKE and BIRCHARD)

1913-14, 16, 544

Hemocyanin—continued:

Coagulation temperature (ALSBERG)

1914, 19, 81

Limulus polyphemus (ALSBERG and CLARK)

1910-11, 8, 1

(ALSBERG)

1914, 19, 77

— —, oxygen, solubility of, in solutions of (ALSBERG and CLARK)

1914, 19, 503

— —, potassium oxalate, action of (ALSBERG)

1915, 23, 501

Hemoglobin:

Amino-acids of (VAN SLYKE)

1911-12, 10, 52

Amino nitrogen of (VAN SLYKE and BIRCHARD)

1913-14, 16, 543

Blood content, dextrose, action of, on (FISHER and WISHART)

1912-13, 13, 58

— —, oxygen, influence of, on (KOLLS and LOEVENHART)

1914, 17, xxxviii

Liver enzymes, digestion by (BRADLEY and TAYLOR)

1916, 25, 27

Muscle, non-striated, content of (SAIKI)

1908, 4, 48

Specificity (BRADLEY and SANSUM)

1914, 17, xxvii

1914, 18, 49

Tissue reductase, reduction by (HARRIS and CREIGHTON)

1915, 20, 17

Hemoglobin—continued:

Trypsin, action of (HOLLIS)

1908, 4, xxxiii

Hemolysin:

Amanita phalloides, glucoside nature of (ABEL and FORD)

1906-07, 2, 273

Hemolysis:

Analytical methods applied to (MANWARING)

1905-06, 1, 213

Fatty acids, power of (MCPHEDRAN)

1912, 11, x

Hemolytic serum:

See Serum.

Hemorrhage:

Amino-acid content of blood, influence on (GYÖRGY and ZUNZ)

1915, 21, 518

Blood composition after repeated (TAYLOR and LEWIS)

1915, 22, 71

Hyperglycemia following (EPSTEIN and BAEHR)

1914, 18, 21

Protein metabolism, influence on (TAYLOR and LEWIS)

1915, 22, 71

Recuperation from, protein, effect of (FOSTER)

1909, 6, xlviii;

1909-10, 7, 379

Emp seed:

Amino-acid content (NOLLAU)

1915, 21, 614

Leptoses:

(PEIRCE)

1914, 17, xxxv;

1915, 23, 327

Heptylic acid:

Glucose formation from (RINGER)

1913, 14, 43

Oxidation in the body (RINGER)

1913, 14, 47

— with hydrogen peroxide (DAKIN)

1908, 4, 229

Herbivora:

Acidosis in (HART and NELSON)

1914, 17, xlv

(STEENBOCK, NELSON, and HART)

1914, 19, 399

Herter, Christian A.:

Appreciation,

1910-11, 8, 437

Memorial fund,

1911-12, 10, 1

Heteroalbumose:

Amino nitrogen content (VAN SLYKE)

1911, 9, 194

(VAN SLYKE and BIRCHARD)

1913-14, 16, 544

Fibrin (LEVENE, VAN SLYKE, and BIRCHARD)

1910-11, 8, 269

Witte's peptone, hydrolysis of (LEVENE)

1905-06, 1, 54

— —, preparation of (LEVENE)

1905-06, 1, 46

Hexacosane:

Preparation (LEVENE, WEST, and VAN DER SCHEER)

1915, 20, 528

Hexadecane:

Preparation (LEVENE, WEST, and VAN DER SCHEER)

1915, 20, 523

Hexamethyleneamine:

See Hexamethylenetetramine:

Hexamethylenetetramine:

Bile, excretion in (CROWE)
1908, 4, xxxv

Determination, colorimetric (COLLINS and HANZLIK)
1916, 25, 231

Excretion (McGUIGAN)
1912, 11, xxxiii

Pancreatic juice, excretion in (CROWE)
1908, 4, xxxv

Salts of (JACOBS and HEIDELBERGER)
1915, 20, 659, 685;
1915, 21, 103, 145,
403, 439, 455, 465

Hexamethylenetetraminium salts:¹

o-Acetaminobenzyl chloride, 1915, 20, 668

p-Acetaminobenzyl chloride,
1915, 20, 668

1-Acetamino-4-ethoxychloroacetylbenzylamine,
1915, 20, 691

p-Acetaminoiodoacetylbenzylamine,
1915, 20, 687

3-Acetamino-4-methylphenacyl bromide,
1915, 21, 461

p-Acetaminophenacyl bromide,
1915, 21, 460

o-Acetaminophenoxyethyl bromide,
1915, 21, 446

p-Acetaminophenoxyethyl bromide,
1915, 21, 448

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

3-Acetamino-4-tolyl doethyl ketone,
1915, 21

β -Acetoxy- α -chloro α -naphthobenzylamine,
1915, 20

2-Acetoxy-3,5-dibromobenzyl bromide,
1915, 20

4-Acetoxy-3,5-dibromobenzyl bromide,
1915, 20

2-Acetoxy-3,5-dimethylbenzyl chloride,
1915, 20

2-Acetoxy-3,5-dimethyl-4,6-dibromobenzylmide,
1915, 20

Acetoxyethyl bromide,
1915, 2

β -Acetoxy- α -iodo α -naphthobenzylamine,
1915, 2

β -Acetyl- α -chloro α -phenylhydrazine,
1915, 2

3-Aldehyde-4-oxybenzyl chloride,
1915, 2

Aliphatic-aromatic tones, ω -halogenatives,
1915, 2

Amines, monohaloacylated aromatic,
1915, 2

—, — simple,
1915, 2

Aminoalcohols, monogenacetyl derivatives,
1915, 2

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- p*-Aminophenacyl chloride,
1915, 21, 460
- p*-Aminophenyl chloromethyl ketone,
1915, 21, 460
- p*-Anisyl bromomethyl ketone,
1915, 21, 462
- Benzeneazo-*m*-chloroacetylaminophenol,
1915, 21, 134
- Benzoyloxyethyl bromide,
1915, 21, 450
- Benzyl halides,
1915, 20, 659
- Bornyl bromoacetate,
1915, 21, 468
- ω -Bromoacetophenoneoxime,
1915, 21, 456
- Bromoacetylaniline,
1915, 21, 104
- β -(ω -Bromoacetyl)-quinoline,
1915, 21, 464
- Bromoacetyl- ω -*o*-toluidinoacetophenone,
1915, 21, 107
- o*-Bromobenzyl chloride,
1915, 20, 665
- p*-Bromobenzyl chloride,
1915, 20, 665
- p*-Bromochloroacetylaniline,
1915, 21, 110
- Bromoethyl acetate,
1915, 21, 449
- benzoate,
1915, 21, 450
- esters,
1915, 21, 449
- ethers,
1915, 21, 440

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- Bromoethyl *p*-nitrobenzoate,
1915, 21, 450
- ω -Bromo-*m*-nitroacetophenone,
1915, 21, 459
- p*-Bromophenoxyethyl bromide,
1915, 21, 444
- m*-Carbethoxychloroacetylbenzylamine,
1915, 20, 692
- 3-Carbomethoxy-4-oxybenzyl chloride,
1915, 20, 681
- 3-Carboxy-4-oxybenzyl chloride,
1915, 20, 681
- Cetyl iodide,
1915, 21, 466
- Chloroacetdiethylamide,
1915, 21, 149
- Chloroacetdimethylamide,
1915, 21, 148
- Chloroacetethylamide,
1915, 21, 149
- Chloroacetmethylamide,
1915, 21, 148
- Chloroacetyl piperidide,
1915, 21, 150
- m*-Chloroacetylaminacetophenone,
1915, 21, 141
- ω -Chloroacetylaminacetophenone,
1915, 21, 472
- p*-Chloroacetylaminobenzene,
1915, 21, 118
- Chloroacetylaminotoluene,
1915, 21, 118
- p*-Chloroacetylaminobenzeneazodiethylaniline,
1915, 21, 124

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- p*-Chloroacetylaminobenzeneazodimethylaniline, 1915, 21, 123
- p*-Chloroacetylaminobenzeneazodipropylaniline, 1915, 21, 125
- p*-Chloroacetylaminobenzeneazoethylbenzylaniline, 1915, 21, 127
- p*-Chloroacetylaminobenzoic acid, diethylaminoethyl ester, 1915, 21, 140
- —, ethyl ester, 1915, 21, 139
- o*-Chloroacetylaminobenzyl alcohol, 1915, 21, 138
- o*-Chloroacetylaminobenzyl benzoate, 1915, 21, 139
- β -Chloroacetylamino- γ -butanol, 1915, 21, 429
- δ -Chloroacetylamino-*n*-butanol, 1915, 21, 427
- β -Chloroacetylamino- γ -butyl *p*-nitrobenzoate, 1915, 21, 429
- δ -Chloroacetylaminobutyl *p*-nitrobenzoate, 1915, 21, 428
- p*-Chloroacetylaminodiethylaniline, 1915, 21, 115
- m*-Chloroacetylaminodimethylaniline, 1915, 21, 113
- p*-Chloroacetylaminodimethylaniline, 1915, 21, 114

¹ All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- p*-Chloroacetylaminodipropylaniline, 1915, 21, 1
- Chloroacetylaminooethylacetylsalicylate, 1915, 21, 4
- anisate, 1915, 21, 4
- (*p*-azodiethylaniline) benzoate, 1915, 21, 4
- benzoate, 1915, 21, 4
- ethyl ether, 1915, 21, 4
- *p*-methoxybenzoate, 1915, 21, 4
- β -naphthoate, 1915, 21, 4
- *m*-nitrobenzoate, 1915, 21, 4
- *o*-nitrobenzoate, 1915, 21, 4
- *p*-nitrobenzoate, 1915, 21, 4
- *o*-toluate, 1915, 21, 4
- *o*-tolyl ether, 1915, 21, 4
- p*-Chloroacetylaminooethylbenzylaniline, 1915, 21, 4
- Chloroacetylaminoisopropanol, 1915, 21, 4
- Chloroacetylaminoisopropyl *p*-nitrobenzoate, 1915, 21, 4
- p*-Chloroacetylaminoleucomalachite green, 1915, 21, 1

¹ All of these salts were prepared by JACOBS and HEIDELBERGER.

examethylenetetraminium salts¹—continued:

- m*-Chloroacetyl-amino-methylbenzamide,
1915, 20, 694
- m*-Chloroacetyl-amino-methylbenzoic acid, diethylaminoethyl ester,
1915, 20, 694
- —, ethyl ester,
1915, 20, 692
- γ -Chloroacetyl-amino- β -methyl- β -butanol,
1915, 21, 431
- Chloroacetylaminomethylmethylethyl carbinol,
1915, 21, 430
- γ -Chloroacetyl-amino- β -pentanol,
1915, 21, 430
- m*-Chloroacetylaminophenol,
1915, 21, 133
- o*-Chloroacetylaminophenol,
1915, 21, 131
- o*-Chloroacetylaminophenyl benzoate,
1915, 21, 131
- *p*-nitrobenzoate,
1915, 21, 132
- γ -Chloroacetylaminopropyl anisate,
1915, 21, 424
- *p*-nitrobenzoate,
1915, 21, 423
- 6-Chloroacetyl-aminoquinoline,
1915, 21, 143
- o*-Chloroacetyl-amino-*p'*,*p''*-tetraethyldiaminotriphenylmethane,
1915, 21, 142
- p*-Chloroacetyl-amino-*p'*,*p''*-tetraethyldiaminotriphenylmethane,
1915, 21, 142

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- Chloroacetylaniline,
1915, 21, 104
- Chloroacetyl- ω -anilinoacetophenone,
1915, 21, 107
- Chloroacetyl-*o*-anisidine,
1915, 21, 135
- Chloroacetyl-*p*-anisidine,
1915, 21, 138
- Chloroacetyl- ω -*o*-anisidinoacetophenone,
1915, 21, 137
- Chloroacetylbenzylamine,
1915, 20, 686
- Chloroacetylbenzylurea,
1915, 21, 152
- Chloroacetyl-*o*-chloroaniline,
1915, 21, 110
- Chloroacetyl- ψ -cumidine,
1915, 21, 109
- Chloroacetyldiphenylamine,
1915, 21, 105
- Chloroacetylethylaminoethyl *p*-nitrobenzoate,
1915, 21, 418
- Chloroacetyl-leucoauramine,
1915, 21, 473
- Chloroacetylmethylaniline,
1915, 21, 105
- Chloroacetyl-*o*-methylbenzylamine,
1915, 20, 686
- Chloroacetylmethylurea,
1915, 21, 151
- Chloroacetyl- α -naphthylamine,
1915, 21, 109
- Chloroacetyl- β -naphthylamine,
1915, 21, 109

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

Chloroacetyl novocain,	1915, 21, 140
Chloroacetyloxyethyl anisate,	1915, 21, 471
Chloroacetylphenylaminoethyl <i>p</i> -nitrobenzoate,	1915, 21, 419
β -Chloroacetyl- α - α -phenylbenzylhydrazine,	1915, 21, 475
Chloroacetylphenylglycinanilide,	1915, 21, 106
Chloroacetyl- <i>m</i> -toluidine,	1915, 21, 108
Chloroacetyl- <i>o</i> -toluidine,	1915, 21, 107
Chloroacetyl- <i>p</i> -toluidine,	1915, 21, 108
Chloroacetyltriphenylamine,	1915, 21, 474
Chloroacetylurea,	1915, 21, 151
Chloroacetylurethane,	1915, 21, 152
Chloroacetyl- <i>m</i> -4-xylidine,	1915, 21, 109
<i>o</i> -Chlorobenzyl chloride,	1915, 20, 665
<i>p</i> -Chlorobenzyl chloride,	1915, 20, 665
Chloromethylanisic acid,	1915, 20, 682
— —, methyl ester,	1915, 20, 683
Chloromethyl- <i>p</i> -cresotinic acid,	1915, 20, 681
5-Chloromethylsalicylaldehyde,	1915, 20, 683

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

Chloromethylsalicylic acid,	1915, 20, 681
— —, methyl ester,	1915, 20, 681
Chloromethylvanillin,	1915, 20, 683
<i>o</i> -Cresoxyethyl bromide,	1915, 21, 440
<i>o</i> -Cyanobenzyl chloride,	1915, 20, 666
<i>p</i> -Cyanobenzyl chloride,	1915, 20, 666
1, 2-Diacetoxychloroacetylbenzylamine,	1915, 20, 692
2,3-Dimethoxybenzyl chloride,	1915, 20, 678
3,4-Dimethoxybenzyl chloride,	1915, 20, 678
1, 2-Dimethoxychloroacetylbenzylamine,	1915, 20, 692
3,5-Dimethylbenzyl chloride,	1915, 20, 663
2,4-Dinitrobenzyl chloride,	1915, 20, 667
α , β -Diphenylchloroacetyl aminoethanol,	1915, 21, 434
Esters, halogenethyl,	1915, 21, 434
Ethers, halogenethyl,	1915, 21, 434
<i>o</i> -Ethoxybenzyl chloride,	1915, 20, 677
<i>p</i> -Ethoxyphenacyl bromide,	1915, 21, 464
<i>p</i> -Ethylphenacyl bromide,	1915, 21, 454

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

**examethylenetetraminium
salts¹—continued:**

Halogenacetyl benzyl amines,	1915, 20, 685
Iodoacetylamin ethanol,	1915, 21, 408
<i>o</i> -Iodobenzyl bromide,	1915, 21, 467
<i>p</i> -Iodobenzyl bromide,	1915, 20, 665
<i>m</i> -Iodochloroacetylani- line,	1915, 21, 111
5-Iodochloroacetyl- <i>o</i> -tolu- idine,	1915, 21, 112
Iodoethyl alcohol,	1915, 21, 465
β -Iodopropionamide,	1915, 21, 147
β -Iodopropionic acid, ethyl ester,	1915, 21, 467
β -Iodopropionyl- <i>o</i> -anisi- dine,	1915, 21, 136
α,β -Isodiphenylchloroace- tylaminoethanol,	1915, 21, 435
Ketones, aliphatic-aromat- ic, ω -halogen deriva- tives,	1915, 21, 455
Menthyl bromoacetate,	1915, 21, 468
Mesitylene chloride,	1915, 20, 664
<i>o</i> -Methoxybenzyl chloride,	1915, 20, 673
<i>p</i> -Methoxybenzyl chloride,	1915, 20, 673
2-Methoxy-5-carbometh- oxybenzyl chloride,	1915, 20, 683

¹All of these salts were prepared
by JACOBS and HEIDELBERGER.

**Hexamethylenetetraminium
salts¹—continued:**

2-Methoxy-5-carboxyben- zyl bromide,	1915, 20, 682
β -Methoxy- α -chloroacetyl- naphthobenzylamine,	1915, 20, 690
3-Methoxy-4-ethoxyben- zyl chloride,	1915, 20, 680
β -Methoxy- α -naphthoben- zyl chloride,	1915, 20, 674
2-Methoxy-5-nitrobenzyl chloride,	1915, 20, 676
<i>p</i> -Methoxyphenacyl bro- mide,	1915, 21, 462
1-Methyl-4-acetamino- chloroacetylbenzylam- ine,	1915, 20, 688
<i>m</i> -Methylbenzyl chloride,	1915, 20, 663
<i>o</i> -Methylbenzyl chloride,	1915, 20, 663
<i>p</i> -Methylbenzyl chloride,	1915, 20, 663
3,4-Methylenedioxybenzyl chloride,	1915, 20, 677
<i>p</i> -Methylphenacyl bro- mide,	1915, 21, 456
— iodide,	1915, 21, 457
<i>m</i> -Methylphenoxyethyl bromide,	1915, 21, 441
<i>o</i> -Methylphenoxyethyl bromide,	1915, 21, 440

¹All of these salts were prepared
by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

- p*-Methylphenoxyethyl bromide, 1915, 21, 441
- β -Naphthobenzyl chloride, 1915, 20, 664
- α -Naphthoxyethyl bromide, 1915, 21, 442
- β -Naphthoxyethyl bromide, 1915, 21, 442
- 3-Nitro-4-acetoxybenzyl iodide, 1915, 20, 673
- p*-Nitrobenzoylaminoisopropyl chloroacetate, 1915, 21, 427
- p*-Nitrobenzoyloxyethyl bromide, 1915, 21, 450
- iodide, 1915, 21, 451
- m*-Nitrobenzyl chloride, 1915, 20, 666
- o*-Nitrobenzyl chloride, 1915, 20, 666
- p*-Nitrobenzyl chloride, 1915, 20, 666
- m*-Nitrochloroacetylamine, 1915, 21, 112
- m*-Nitrochloroacetyl-*p*-toluidine, 1915, 21, 112
- 2-Nitro-3,4-dimethoxybenzyl chloride, 1915, 20, 679
- 3-Nitro-4-methoxybenzyl chloride, 1915, 20, 676
- m*-Nitrophenacyl bromide, 1915, 21, 459
- o*-Nitrophenyl bromoacetate, 1915, 21, 470

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetram salts¹—continued:

- 2-Oxy-3-carbomethylnaphthobenzyl 1915
- 2-Oxy-3-carboxybenzyl chloride 1915
- 2-Oxy-3,5-dibromobenzyl bromide, 1915
- Oxyethyl iodide, 1915
- 2-Oxy-3-methoxybenzyl chloride 1915
- Oxymethylchloroacetate, 1915
- 2-Oxy-5-nitrobenzyl bromide, 1915
- p*-Phenetyl bromide, 1915
- Phenoxyethyl bromide, 1915
- Phenyl bromoacetate, 1915
- Phenylethyl iodide, 1915
- α -Phenyl- α -oxy- β -acetylaminopropyl 1915
- β -Phenyl- β -oxy- α -acetylaminopropyl 1915
- Piperonyl chloride, 1915
- o*-Tolueneazochloride, 1915
- p*-Tolyliodomethyl bromide, 1915
- Tribromo-*p*-methoxyethyl bromide, 1915

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexamethylenetetraminium salts¹—continued:

Trimethylene chlorobromide,

1915, 21, 465

Trimethylene iodohydrin,

1915, 21, 466

Ureas, monohalogenacylated,

1915, 21, 145

Urethanes, monohalogenacylated,

1915, 21, 145

m-Xylyl bromomethyl ketone,

1915, 21, 458

o-Xylyl bromomethyl ketone,

1915, 21, 458

m-Xylylene chloride,

1915, 20, 664

o-Xylylene chloride,

1915, 20, 663

Hexatriacontane:

(LEVENE, WEST, and VAN DER SCHEER)

1915, 20, 531

Hexocytidine diphosphoric acid:

Thymus nucleic acid, isolation from (LEVENE and JACOBS)

1912, 12, 419

Hexone bases:

Autolysis of *Glomerella*, formation in (REED)

1914, 19, 257

Bacillus coli communis, cell substance, content of (LEACH)

1905-06, 1, 485

Casein, content of (VAN SLYKE)

1913-14, 16, 531

¹All of these salts were prepared by JACOBS and HEIDELBERGER.

Hexone bases—continued:

Fibrin heteroalbumose, content of (LEVENE, VAN SLYKE, and BIRCHARD)

1910-11, 8, 280;

1911-12, 10, 68

— protoalbumose, content of (LEVENE, VAN SLYKE, and BIRCHARD)

1911-12, 10, 67

Kidney, content of (WAKEMAN)

1908, 4, 121

Liver, content of (WAKEMAN)

1908, 4, 121

Muscle, content of (WAKEMAN)

1908, 4, 121

Tumors, malignant, content of (KOCHER)

1915, 22, 295

Hexonic acid:

Deamino chondrosamine, bromine oxidation of (LEVENE and LA FORGE)

1914, 18, 130

Hexosamine:

See Chondrosamine, Glucosamine.

Hexosaminic acid:

Ribose, preparation from (LEVENE and LA FORGE)

1915, 20, 441

Hexose:

Leukocytes, action of (LEVENE and MEYER)

1913, 14, 149, 551

Phenylosazones, mutarotation of (LEVENE and LA FORGE)

1915, 20, 429

Tissue, kidney, action of (LEVENE and MEYER)

1913, 15, 65

Walden rearrangement in (LEVENE and LA FORGE)

1915, 21, 345

Hexothymidine diphosphoric acid:

Thymus nucleic acid, isolation from (LEVENE and JACOBS)

1912, 12, 417

Hickory nut:

Amino-acid content (NOLLAU)

1915, 21, 614

Hippuric acid:

Benzoic acid, effect on excretion of (McCOLLUM and HOAGLAND)

1913-14, 16, 321

(LEWIS)

1914, 18, 225

— —, formation from (DAKIN)

1909-10, 7, 103

Creatinine excretion, influence on (LEWIS and KARR)

1916, 25, 20

Determination (DAKIN)

1909-10, 7, 106

(VAN SLYKE)

1913-14, 16, 133

— in blood (KINGSBURY)

1915, 21, 289

— — tissues (KINGSBURY)

1915, 21, 289

— — urine (STEENBOCK)

1912, 11, 201

(FOLIN and FLANDERS)

1912, 11, xxvii, 257

(VAN SLYKE)

1913-14, 16, 133

Diastase accelerator (ROCKWOOD)

1916, 24, xxix

Diet, influence of, on synthesis of (RINGER)

1911-12, 10, 327

Excretion in monkey (HUNTER and GIVENS)

1914, 17, 55

Hippuric acid—continued:

Formation and elimination from animal body (RAIZISS, RAIZISS, and RINGER)

1914, 17, 527

Glyoxylic acid from, on oxidation with hydrogen peroxide (DAKIN)

1905-06, 1, 272

Maximum production (RINGER)

1911-12, 10, 327

Molds, hydrolysis by (DOX)

1909, 6, 465

Output, maximum (EPSTEIN and BOOKMAN)

1912-13, 13, 117

Oxidation (DAKIN)

1905-06, 1, 272

Phosphorus poisoning, influence on (EPSTEIN and BOOKMAN)

1912-13, 13, 122

Sulfuric acid, reaction with (ERDMANN)

1910-11, 8, 54

Synthesis, animal organism (LEWIS)

1914, 17, 503;

1914, 18, 225

(RAIZISS and DUBIN)

1915, 21, 331

(LEWIS and KARR)

1916, 25, 13

—, experimental tartrate nephritis (KINGSBURY and BELL)

1915, 20, 73, xxxii

—, glycocoll-free diet (LEWIS)

1914, 17, 503

—, nephrectomized dogs (KINGSBURY and BELL)

1915, 21, 297

puric acid—continued:

Synthesis, protein diet
(RAIZISS and DUBIN)
1915, 21, 331

Uric acid determination in
urine, effect on (LEWIS
and KARR)

1916, 25, 14

— — excretion, effect on
(LEWIS and KARR)

1916, 25, 19

Urine, alkaline decomposi-
tion in (RAIZISS and
DUBIN)

1915, 21, 334

udin:

Immunization against anti-
coagulating effect (VERA
and LOEB)

1914, 17, xxv;

1914, 19, 305

Prothrombin, compound
with (VERA and LOEB)

1914, 19, 320

tidine:

Casein content (VAN
SLYKE)

1913-14, 16, 531

Catabolism (DAKIN and
WAKEMAN)

1911-12, 10, 499

Edestin content (VAN
SLYKE)

1911-12, 10, 46

Fibrin content (VAN
SLYKE)

1911-12, 10, 50

— heteroalbumose content
(LEVENE, VAN SLYKE,
and BIRCHARD)

1910-11, 8, 280;

1911-12, 10, 69

— protoalbumose content
(LEVENE, VAN SLYKE,
and BIRCHARD)

1911-12, 10, 68

Histidine—continued:

Gelatin content (VAN
SLYKE)

1911-12, 10, 49

Gliadin content (VAN
SLYKE).

1911-12, 10, 45

(OSBORNE, VAN SLYKE,
LEAVENWORTH, and VIN-
OGRAD)

1915, 22, 261

Glomerella, presence in
(REED)

1914, 19, 260

Growth, influence on (Os-
BORNE and MENDEL)

1914, 18, 11

Hair content (VAN SLYKE)

1911-12, 18, 47

Hemocyanin content (VAN
SLYKE)

1911-12, 10, 51

Hemoglobin content (VAN
SLYKE)

1911-12, 10, 53

Kidney content (WAKE-
MAN)

1908, 4, 123

Legumelin content (Os-
BORNE and HEYL)

1908-09, 5, 198

Legumin content (Os-
BORNE and CLAPP)

1907, 3, 225

Liver content (WAKEMAN)

1908, 4, 123

— — after chloroform
necrosis (WELLS)

1908-09, 5, 139

Metabolism of (DAKIN)

1913, 14, 328

Muscle content (WAKE-
MAN)

1908, 4, 123

Nitrous acid, reaction with
(VAN SLYKE)

1911, 9, 192

Histidine—continued:

Placenta content (KOELKER and SLEMONS)
1911, 9, 486

Proteins, determination in (VAN SLYKE)
1911-12, 10, 29;
1916, 23, 411

Rice kernel protein content (OSBORNE, VAN SLYKE, LEAVENWORTH, and VINOGRAD)
1915, 22, 275

Soils, presence in (SCHREINER and SHOREY)
1910-11, 8, 381

Thyreoglobulin, presence in (KOCH)
1911, 9, 121

Tissue, animal, determination in (WAKEMAN)
1908, 4, 119

Tumors, malignant, content (KOCHER)
1915, 22, 300

Vicilin content (OSBORNE and HEYL).
1908-09, 5, 188

Vitellin content (LEVENE and ALSBERG)
1906-07, 2, 132

Hog cholera:

Urea nitrogen of (KENDALL and WALKER)
1913, 15, 281

Homogentisic acid:

Tyrosine, rôle in metabolism of (DAKIN)
1910-11, 8, 11

Urine content in alcaptonuria (RAVOLD and WARREN)
1909-10, 7, 478

Hordein:

Heat of combustion (BENEDICT and OSBORNE)
1907, 3, 132

Hordein—continued:

Nutrition and
and MENDEL)
191

Hordeum sativum:

Phytic acid from
and TOTTINGHAM
191

Horse gram:

Urease content
and MARSHALL
191

Humin:

Tryptophane,
from (OSBORNE,
SLYKE, LEAVENWORTH,
and VINOGRAD)
191
(VAN SLYKE)
191

Hydantoic acid:

Ethyl ester, method
(LEWIS)
1912-1

Hydantoin:

(BRAUTLECHT)
1911-1
(WHEELER,
and JOHNSON)
1911-1
(JOHNSON)
19

(JOHNSON and
LECHT)
191

(JOHNSON and
191

Derivatives, method
of (LEWIS)
1912-1
191
19

—, phenol reaction with (I
NICOLET)
1913-1

Hydantoin—continued:

Derivatives, uric acid reagent, reaction with (LEWIS and NICOLET)

1913-14, 16, 369

Metabolism (LEWIS)

1912-13, 13, 347

Racemization of (DAKIN)

1910-11, 8, 31

Resolution of (DAKIN and DUDLEY)

1914, 17, 29

Hydrastine:

Picrolonate (WARREN and WEISS)

1907, 3, 337

Hydrazine:

Adrenalin, effect on secretion of (UNDERHILL and FINE)

1911-12, 10, 283

Blood ammonia content, effect of liver poisoned with hydrazine on (FISKE and KARSNER)

1914, 18, 381

— composition, influence on (UNDERHILL)

1914, 17, 293

— pressure, influence on (UNDERHILL)

1911-12, 10, 168

— sugar content, influence on (UNDERHILL)

1911-12, 10, 159

Dextrose utilization, effect on (UNDERHILL and HOGAN)

1915, 20, 203

Glycogen, influence on (UNDERHILL)

1911-12, 10, 162

— storage, influence on (UNDERHILL)

1914, 17, 293

Hydrazine—continued:

Glyoxalase activity, influence on (UNDERHILL and HOGAN)

1915, 20, 211

Heat production, influence on (UNDERHILL and MURLIN)

1915, 22, 499

Histological study of action of (UNDERHILL and KLEINER)

1908, 4, 177

Hypoglycemia in rabbits (UNDERHILL and HOGAN)

1915, 20, 205

—, rôle of muscle in (UNDERHILL and PRINCE)

1914, 17, 299

Lethal dose (UNDERHILL)

1911-12, 10, 161

Metabolism, intermediary, influence on (UNDERHILL and PRINCE)

1914, 17, 299

Nitrogen distribution in urine, effect on (UNDERHILL and KLEINER)

1908, 4, 171

Organism, influence on (UNDERHILL)

1911-12, 10, 159

Pancreatic diabetes, prevention by (UNDERHILL and FINE)

1911-12, 10, 273

Respiratory quotient, influence on (UNDERHILL and MURLIN)

1915, 22, 499

Sugar disappearance from solutions perfused through heart, influence on (UNDERHILL and PRINCE)

1914, 17, 299

Hydrazine—continued:

Sugar metabolism, action on (UNDERHILL and FINE)

1911-12, 10, 280

Sulfur distribution in urine, effect on (UNDERHILL and KLEINER)

1908, 4, 171

Hydrobilirubin:

Extraintestinal origin of (AUSTIN and ORDWAY)

1908, 4, xxxii

Reaction of feces in advanced anemia (HERTER)

1906-07, 2, 15

Hydrocarbon:

Aliphatic, preparation (LEVENE, WEST, and VAN DER SCHEER)

1915, 20, 521

Oil, absorption of (BLOOR)

1913, 15, 107

Hydrocephalin:

Preparation (LEVENE and WEST)

1916, 24, 52

Hydrochloric acid:

Autolysis, influence on (BRADLEY)

1915, 22, 116

Barium sulfate precipitation, influence on (FOLIN)

1905-06, 1, 146

Gastric contents, recognition and determination in (KASTLE and AMOSS)

1907, 3, xi

Magnesium sulfate anesthesia, influence on (UNDERHILL)

1916, 25, 477

Metabolism, effect on (McCOLLUM and HOAGLAND)

1913-14, 16, 309

Hydrochloric acid—continued:

Metabolism, effect on (STEENBOCK, NELSON, and HART)

1914, 19, 405

Morphological changes induced by chloroform, relation to (GRAHAM)

1915, 20, xxv

Osmotic pressure of lecithin suspensions, influence on (THOMAS)

1915, 23, 365

Permeability, effect on (OSTERHOUT)

1914, 19, 493

Phytase, action on (ANDERSON)

1915, 20, 490

Rice plant, influence on growth of (MIYAKE)

1916, 25, 26

Sodium chloride in, chemical and physiological properties (PETERS)

1908, 4, xxviii

Tetany, effect on (WILSON, STEARNS, and JANNEY)

1915, 21, 171

(WILSON, STEARNS, and THURLOW)

1915, 23, 95

Urease, action on (MARSHALL)

1914, 17, 356

Viscosity of lecithin suspensions, influence on (THOMAS)

1915, 23, 369

Hydrocyanic acid:

Bacteria, production by (CLAWSON and YOUNG)

1913, 15, 419

Burley tobacco, growth of, influence on (OOSTHUIZEN and SHEDD)

1913-14, 16, 448

Hydrocyanic acid—continued:

Grasses, content of (ALSBERG and BLACK)

1915, 21, 601;

1916, 25, 133

(VIEHOEVER, JOHNS, and ALSBERG)

1916, 25, 141

Liver autolysis, effect on (BRADLEY and TAYLOR)

1916, 25, 262

Plant tissues, disappearance from, during maceration (ALSBERG and BLACK)

1916, 25, 133

— —, separation from (ALSBERG and BLACK)

1916, 25, 133

Proteins, formation from (EMERSON, CADY, and BAILEY)

1913, 15, 415

Proteolysis, acceleration of (MENDEL and BLOOD)

1910-11, 8, 179

Test for (EMERSON, CADY, and BAILEY)

1913, 15, 415

Thyroid feeding, influence of, on poisoning by (HUNT)

1905-06, 1, 42

Tridens flavus, content of (VIEHOEVER, JOHNS, and ALSBERG)

1916, 25, 141

Hydrogen:

Hair, content of (RUTHERFORD and HAWK)

1907, 3, 462

Urine, content of (BRAMAN)

1914, 19, 108

Hydrogen electrode:

(McCLENDON)

1916, 24, 521

Hydrogen electrode—continued:

Potentials, barometer corrections (CLARK and LUBS)

1916, 25, 486

—of phthalate, phosphate, and borate buffer mixtures (CLARK and LUBS)

1916, 25, 479

Tonometer and (McCLENDON and MAGOON)

1916, 25, 675

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2-Methylmercapto-4-amino-6-oxypyrimidine:

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 α -Methylxyloside:

Tissue extracts, action of (LEVENE, JACOBS, and MEDIGRECEANU)

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Tissue extracts, action of (LEVENE, JACOBS, and MEDIGRECEANU)

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β -Phenylpropionic acid (DAKIN)

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1916, 25, 205

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1915, 20, 16

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1916, 24, 534

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1909, 6, 549

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1909, 6, 240

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1910-11, 8, 277

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1908-09, 5, 198

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1907, 3, 225

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1914, 17, 35

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1912, 12, 135

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1911, 9, 485

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1905-06, 1, 51

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1909, 6, 549

Vicilin content (OSBORNE
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1908-09, 5, 188

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1906-07, 2, 130

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1912, 12, 136

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 α -Phenyl- α -benzoyloxy- β -benzoylaminopropane:

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— —, transportation by
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—, transportation by (PALMER)

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1915, 21, 458

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(JACOBS and HEIDELBER-
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continued:**

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)
1915, 21, 458

***m*-Xylylene chloride:**

Hexamethylenetetramin-
ium salt (JACOBS and
HEIDELBERGER)
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ium salt (JACOBS and
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1911, 9, 82, 400

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1916, 24, iv

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—, partial enzymatic (JONES and RICHARDS)

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1911, 9, 386

— mucosa, action of (LEVENE and MEDIGRECEANU)

1911, 9, 81, 399

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1911, 9, 82, 400

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1911, 9, 385

— plasma, action of (LEVENE and MEDIGRECEANU)

1911, 9, 399

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1908-09, 5, 469

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1908-09, 5, 473

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1911-12, 10, 86

Yeast, action of (AMBERG and JONES)

1912-13, 13, 441

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1916, 24, xxxiv

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1916, 24, xxxiv

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1913-14, 16, 544

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1914, 18, 180

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1914, 17, 349

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1914, 17, 343

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- Glucose from, in diabetic organism (JANNEY)
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- Growth with (OSBORNE and MENDEL)
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- Lactalbumin and, growth with (OSBORNE and MENDEL)
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- Lysine content (OSBORNE and LEAVENWORTH)
1913, 14, 481
- Maintenance with (OSBORNE and MENDEL)
1912-13, 13, 274
- Poison, crude soluble, from, physiological action of (UNDERHILL and HENDRIX)
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- Tryptophane, lysine, arginine, and, growth on (OSBORNE and MENDEL)
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- Tryptophane, lysine, and, necessary for growth (OSBORNE and MENDEL)
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- Physiological action (UNDERHILL and HENDRIX)
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- Amalgam, use in synthetic chemistry (JOHNSON and CHERNOFF)
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- Cysteine, spontaneous oxidation, influence on (MATHEWS and WALKER)
1909, 6, 303

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- Liver autolysis, effect on (BRADLEY and TAYLOR)
1916, 25, 267

Zinc salt:

- Uric acid (MORRIS)
1916, 25, 205

Zymolyte:

- (LOEVENHART and PEIRCE)
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FORMULA INDEX.

following index of *new* compounds of known empirical formula is arranged according to Richter's system (*Lexikon der Stoff Verbindungen*).

elements are given in the order C, H, O, N, Cl, Br, I, F, and the remainder alphabetically.

compounds are arranged in groups according to the number of carbon atoms (thus, C₁ group, C₂ group, etc.); according to the number of other elements besides carbon contained in the molecule (thus, C₅ IV indicates that the molecule contains five carbon atoms and four other elements); according to the nature of the elements present in the molecule (given in above order); and according to the number of atoms of single element (except carbon) present in the molecule.

They are placed with the compounds from which they are derived. The chlorides, bromides, iodides, and cyanides of primary ammonium bases, however, are registered as group names.

C₂ Group

C₂ II

- 1 Methylguanidine, picrolonate (WHEELER and JAMIESON) 1908, 4, 115

C₂ III

- 2N Glycocoll, picrate (LEVENE) 1905-06, 1, 413
 (LEVENE and VAN SLYKE) 1912, 12, 287
 —, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 132

C₃ Group

C₃ II

- 1 1,2-Dimethylguanidine, picrate (WHEELER and JAMIESON) 1908, 4, 116
 2,2-Dimethylguanidine, picrate, picrolonate (WHEELER and JAMIESON) 1908, 4, 115

C, III

C ₃ H ₇ O ₂ N	<i>d</i> -Alanine, picrolonate (LEVENE and VAN SLIKE)	1912, 12, 131
	<i>dl</i> -Alanine, picrolonate (LEVENE and VAN SLIKE)	1912, 12, 131
C ₃ H ₇ O ₃ N	Sarcosine (BAUMANN)	1915, 21, 563
	<i>dl</i> -Serine, picrolonate (LEVENE and VAN SLIKE)	1912, 12, 136
C ₃ H ₈ N ₂ S	2-Ethylpseudothiourea, picrate, picrolonate (WHEELER and JAMIESON)	1908, 4, 117

C, IV

C ₃ H ₄ OCl	β -Iodopropionyl chloride (JACOBS and HEIDELBERGER)	1915, 21, 136
C ₃ H ₆ ONCl	Chloroacetmethylamide (JACOBS and HEIDELBERGER)	1915, 21, 147
C ₃ H ₆ ONI	α -Iodopropionamide (JACOBS and HEIDELBERGER)	1915, 21, 146
	β -Iodopropionamide (JACOBS and HEIDELBERGER)	1915, 21, 146

C₄ GroupC₄ II

C ₄ H ₆ N ₂	6-Aminopyrimidine (WHEELER and JOHNSON)	1907, 3, 189
	—, hydrochloride, picrate, sulfate (WHEELER)	1907, 3, 292
	—, picrolonate (WHEELER and JAMIESON)	1908, 4, 114

C₄ III

C ₄ H ₂ N ₂ Cl	2,6-Dichloropyrimidine (JOHNSON and MENGE)	1906-07, 2, 114
C ₄ H ₄ ON ₂	6-Oxypyrimidine, hydrochloride, picrate, sulfate (WHEELER)	1907, 3, 288
	—, picrolonate (WHEELER and JAMIESON)	1908, 4, 114
C ₄ H ₄ O ₂ N ₂	Uracil, potassium salt (JOHNSON and CLAPP)	1908-09, 5, 60
	—, lead, mercury, potassium, and sodium salts (MYERS)	1909-10, 7, 253
C ₄ H ₅ ON ₃	Cytosine, acid phosphate, acid sulfate, basic sulfate, hydrochloride, sulfate (WHEELER)	1907, 3, 293
	—, picrolonate (WHEELER and JAMIESON)	1908, 4, 113

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- 2-Amino-6-oxypyrimidine (isocytosine), hydrochloride, sulfate (WHEELER) 1907, 3, 293
 —, picrolonate (WHEELER and JAMIESON) 1908, 4, 114
O₂N₃ 2,5-Dioxy-6-aminopyrimidine (5-oxycytosine), picrate (JOHNSON and McCOLLUM) 1905–06, 1, 446
O₂N₂ Methylhydantoin (BAUMANN) 1915, 21, 565
N₂S₂ Dithiopiperazine (JOHNSON and BURNHAM) 1911, 9, 455
O₄N *dl*-Aspartic acid, picrolonate (LEVENE and VAN SLYKE) 1912, 12, 131
O₃N₂ Methylureidoacetic acid (BAUMANN) 1915, 21, 565
N₃S₂ Thioglycylglycinethioamide (JOHNSON and BURNHAM) 1911, 9, 457

C₄ IV

- O₂N₂I** 2,6-Dioxy-5-iodopyrimidine (5-iodouracil) (JOHNSON and JOHNS) 1905–06, 1, 310
ON₂I 5-Iodocytosine, picrate, acetic acid salt (JOHNSON and JOHNS) 1905–06, 1, 311
O₃N₂Br₂ Dibromooxyhydrouracil (WHEELER and JOHNSON) 1907, 3, 187
ON₂S 2-Thio-4-methylhydantoin (JOHNSON) 1912, 11, 100
ONCl Chloroacetdimethylamide (JACOBS and HEIDELBERGER) 1915, 21, 148
 Chloroacetethylamide (JACOBS and HEIDELBERGER) 1915, 21, 149
O₂NCl Chloroacetylamin ethanol (JACOBS and HEIDELBERGER) 1915, 21, 407

C₅ Group**C₅ II**

- N₄** Base from urine, picrolonate (KOCH) 1913, 15, 53

C₅ III

- ON₄** 2-Oxypurine, hydrochloride, nitrate, picrate (JOHNS) 1912, 11, 69
O₂N₄ 2,6-Dioxypurine (xanthine) (JOHNS and HOGAN) 1913, 14, 304

- $C_5H_5O_4N_3$ 2,6-Dioxy-3-methyl-5-nitropyrimidine (JOHNS)
1912, 11, 76; 1913, 14, 4
(JOHNS and BAUMANN) 1913-14, 16, 139
- $C_5H_5O_2N_2$ Thymine, potassium salt (JOHNSON and CLAPP)
1908-09, 5, 59
—, sodium, lead, mercury, and potassium salts
(MYERS) 1909-10, 7, 251
- $C_5H_5O_2N_4$ Formyl-2-oxy-5,6-diaminopyrimidine (JOHNS)
1912, 11, 68
- $C_5H_5O_3N_4$ 2-Oxy-3-methyl-5-nitro-6-aminopurine (JOHNS)
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2-Oxy-5-nitro-6-methylaminopyrimidine (JOHNS)
1911, 9, 164
- $C_5H_7O_2N_5$ 4-Imidopseudouric acid (LEVENE and SENIOR)
1916, 25, 618
- $C_5H_7O_3N$ 2-Oxy-3-methyl-6-aminopyrimidine (3-methylcyto-
sine), picrate (JOHNSON and CLAPP)
1908-09, 5, 62
2-Oxy-6-methylaminopyrimidine (JOHNS)
1911, 9, 163
- $C_5H_7O_5N_3$ α -Oxynitrohydrothymine (JOHNSON)
1908, 4, 410
 β -Oxynitrohydrothymine (JOHNSON)
1908, 4, 414
- $C_5H_8ON_4$ 2-Oxy-5-amino-6-methylaminopyrimidine (JOHNS)
1911, 9, 165
2-Oxy-3-methyl-5,6-diaminopyrimidine (JOHNS)
1912, 11, 77
- $C_5H_9O_4N$ *d*-Glutaminic acid, picrolonate (LEVENE and VAN
SLYKE) 1912, 12, 132
dl-Glutaminic acid, picrolonate (LEVENE and VAN
SLYKE) 1912, 12, 132
- $C_5H_{11}O_2N$ *d*-Valine, picrolonate (LEVENE and VAN SLYKE)
1912, 12, 136
dl-Valine, picrolonate (LEVENE and VAN SLYKE)
1912, 12, 137
- $C_5H_{11}O_4N$ *d*-Lyxosimine (LEVENE and LA FORGE)
1915, 22, 333
Ribosimine (LEVENE and LA FORGE)
1915, 20, 440

C₅ IV

- $C_5H_4ON_4S$ 2-Oxy-8-thiopurine (JOHNS) 1915, 21, 321
- $C_5H_4ON_4S_2$ 2,8-Dithio-6-oxypurine (JOHNS and HOGAN)
1913, 14, 305
- $C_5H_4O_2N_4S$ 2-Thio-6,8-dioxypurine (JOHNS and HOGAN)
1913, 14, 302

$\text{C}_5\text{H}_5\text{O}_2\text{N}_2\text{Br}$	3-Methyl-5-bromouracil (JOHNSON and CLAPP)	1908-09, 5, 64
$\text{C}_5\text{H}_5\text{O}_3\text{N}_4\text{S}$	2-Methylmercapto-4-amino-5-nitroso-6-oxypyrimidine (JOHNS and BAUMANN)	1913, 14, 384
$\text{C}_5\text{H}_5\text{ON}_4\text{S}$	2-Methylmercapto-4,5-diamino-6-oxypyrimidine (JOHNS and BAUMANN)	1913, 14, 385
$\text{C}_5\text{H}_5\text{O}_2\text{N}_2\text{I}_2$	Methylene bisiodoacetamide (JACOBS and HEIDELBERGER)	1915, 21, 150
$\text{C}_5\text{H}_{10}\text{O}_3\text{NCl}$	Chloroacetylaminoisopropanol (JACOBS and HEIDELBERGER)	1915, 21, 424

C₆ GroupC₆ II

$\text{C}_6\text{H}_8\text{O}_7$	α, α_1 -Anhydro-idosaccharic acid (LEVENE and LA FORGE)	1915, 21, 357
	α, α_1 -Anhydromucic acid (LEVENE and LA FORGE)	1915, 22, 334
	α, α_1 - <i>l</i> -Anhydrosaccharic acid (LEVENE and LA FORGE)	1915, 21, 358
	Chondrosic acid (LEVENE and LA FORGE)	1914, 18, 128; 1915, 20, 438
	Epichondrosic acid (LEVENE and LA FORGE)	1915, 20, 439
	<i>l</i> -Epi-isosaccharic acid (LEVENE and LA FORGE)	1915, 20, 442; 1915, 21, 358
$\text{C}_6\text{H}_{10}\text{O}_5$	Mycodextran (DOX and NEIDIG)	1914, 18, 172
	Mycogalactan (DOX and NEIDIG)	1914, 19, 235
$\text{C}_6\text{H}_{10}\text{O}_8$	Acid from oxidation of chondrosin (LEVENE and LA FORGE)	1913, 15, 78

C₆ III

$\text{C}_6\text{H}_6\text{ON}_4$	2-Oxy-1-methylpurine, picrate (JOHNS)	1912, 11, 78
	2-Oxy-8-methylpurine, picrate (JOHNS)	1912, 11, 71
	2-Oxy-9-methylpurine (JOHNS)	1911, 9, 166
$\text{C}_6\text{H}_6\text{O}_2\text{N}_2$	"Urocanic acid" (β -imidazole-4(5)-acrylic acid), picrate, and picrolonate (HUNTER)	1912, 11, 537
$\text{C}_6\text{H}_6\text{O}_2\text{N}_4$	2,8-Dioxy-1-methylpurine (JOHNS)	1912, 11, 398
	2,6-Dioxy-9-methylpurine (JOHNS)	1911, 9, 167

- C₆H₆O₄N₂** Thymine-4-carboxylic acid (JOHNSON) 1907, 3, 304
 —, lead, barium, and potassium salts (JOHNSON) 1907, 3, 304
- C₆H₇ON₃** Acetyl-6-aminopyrimidine (WHEELER) 1907, 3, 291
- C₆H₇O₄N₃** 2,6-Dioxy-3,4-dimethyl-5-nitropyrimidine (JOHNS and BAUMANN) 1913-14, 16, 139
- C₆H₈O₂N₂** 1,5-Dimethyl-2,6-dioxypyrimidine (1-methylthymine) (JOHNSON and CLAPP) 1908-09, 5, 56
 3,5-Dimethyl-2,6-dioxypyrimidine (3-methylthymine) (JOHNSON and CLAPP) 1908-09, 5, 56
 1,3-Dimethyluracil (JOHNSON and CLAPP) 1908-09, 5, 61
 2,6-Dioxy-5-ethylpyrimidine (5-ethyluracil) (JOHNSON and MENGE) 1906-07, 2, 111
- C₆H₈O₂N₄** Acetyl-2-oxy-5,6-diaminopyrimidine (JOHNS) 1912, 11, 71
 Formyl-2-oxy-3-methyl-5,6-diaminopyrimidine (JOHNS) 1912, 11, 77
- C₆H₈O₃N₂** Acetylformamide acrylic acid (WHEELER) 1907, 3, 291
 2,6-Dioxy-5-ethoxypyrimidine (JOHNSON and McCOLLUM) 1905-06, 1, 445
 2,6-Dioxy-4-hydroxymethyl-5-methylpyrimidine (JOHNSON and CHERNOFF) 1913, 14, 319
- C₆H₈O₃N₄** 2-Oxy-3,4-dimethyl-5-nitro-6-aminopyrimidine (JOHNS and BAUMANN) 1913-14, 16, 137
 2-Oxy-3-methyl-5-nitro-6-methylaminopyrimidine (JOHNS) 1913, 14, 3; 1914, 17, 4
 2-Oxy-4-methyl-5-nitro-6-methylaminopyrimidine (JOHNS) 1912, 11, 396
 2-Oxy-5-nitro-6-ethylaminopyrimidine (JOHNS and HENDRIX) 1914, 19, 28
- C₆H₉ON₃** 2-Oxy-3,5-dimethyl-6-aminopyrimidine (JOHNSON and CLAPP) 1908-09, 5, 65
 2-Oxy-6-ethylaminopyrimidine (JOHNS and HENDRIX) 1914, 19, 27
 2-Oxy-5-ethyl-6-aminopyrimidine (5-ethylcytosine) (JOHNSON and MENGE) 1906-07, 2, 112
 —, chloroplatinate, hydrobromide, hydrochloride, nitrate, picrate (JOHNSON and MENGE) 1906-07, 2, 112
 2-Oxy-4-methyl-6-methylaminopyrimidine (JOHNS) 1912, 11, 395

O_2N_3	2-Amino-5-ethoxy-6-oxypyrimidine (JOHNSON and McCOLLUM)	1905-06, 1, 448
	α -Cyanobutyrylurea (JOHNSON and JOHNS)	1905-06, 1, 317
	2,4-Dioxy-5-ethyl-6-aminopyrimidine (JOHNSON and JOHNS)	1905-06, 1, 317
	2-Oxy-5-ethoxy-6-aminopyrimidine (5-ethoxycytosine) (JOHNSON and McCOLLUM)	1905-06, 1, 445
O_5N_3	1-Methyl-5-nitro-4-oxyhydrothymine (JOHNSON and CLAPP)	1908-09, 5, 58
	3-Methyl-5-nitro-4-oxyhydrothymine (JOHNSON and CLAPP)	1908-09, 5, 58
ON_4	2-Oxy-5-amino-6-ethylaminopyrimidine (JOHNS and HENDRIX)	1914, 19, 28
	2-Oxy-3,4-dimethyl-5,6-diaminopyrimidine (JOHNS and BAUMANN)	1913-14, 16, 140
	2-Oxy-3-methyl-5-amino-6-methylaminopyrimidine (JOHNS)	1913, 14, 4
	2-Oxy-4-methyl-5-amino-6-methylaminopyrimidine (JOHNS)	1912, 11, 397
$3O_2N$	<i>d</i> -Isoleucine, picrolonate (LEVENE and VAN SLYKE)	1912, 12, 133
	<i>d</i> -Leucine, picrolonate (LEVENE and VAN SLYKE)	1912, 12, 134
	<i>l</i> -Leucine, picrolonate (LEVENE and VAN SLYKE)	1912, 12, 133
	<i>dl</i> -Leucine, picrolonate (LEVENE and VAN SLYKE)	1912, 12, 134
$3O_2N$	Chondrosaminic acid, reduction product (LEVENE and LA FORGE)	1915, 20, 437
$3O_5N$	Chondrosamine (LEVENE and LA FORGE)	1913, 15, 158; 1914, 18, 126, 240
$3O_6N$	Chondrosaminic acid (LEVENE and LA FORGE)	1915, 20, 436
	Hexosaminic acid from ribose (LEVENE and LA FORGE)	1915, 20, 441
	<i>d</i> -Lyxohexosaminic acid (LEVENE and LA FORGE)	1915, 22, 333
	Xylohexosaminic acid (LEVENE and LA FORGE)	1915, 21, 354
O_9P_1	Inosite monophosphate, barium salt (ANDERSON)	1914, 18, 444
$5O_{15}P_3$	Inosite triphosphate, barium salts, strychnine salt (ANDERSON)	1915, 20, 470
$5O_{15}P_4$	Inosite dipyrophosphoric acid ester, barium salt (ANDERSON)	1912, 12, 109

$C_6H_{16}O_{13}P_4$ Inosite tetraphosphoric acid ester, barium salt
(ANDERSON) 1912, 11, 484

$C_6H_{24}O_{27}P_6$ Phytic acid (ANDERSON)
1912, 11, 478; 1912, 12, 103;
1912-13, 13, 316; 1914, 17, 144,
154, 166, 175; 1915, 20, 496

—, tribarium, pentabarium, pentabarium ammonium, pentamagnesium ammonium, tetracupric dicalcium salts (ANDERSON) 1912, 11, 478

—, calcium magnesium potassium, pentacalcium, pentamagnesium, hexacopper, heptasilver, octasilver salts (ANDERSON) 1912, 12, 103

C, IV

$C_6H_6ON_4S$ 2-Oxy-8-methylmercaptapurine (JOHNS) 1915, 21, 322

$C_6H_6ON_4S_2$ 2-Methylmercapto-6-oxy-8-thiopurine (JOHNS and BAUMANN) 1913, 15, 521

$C_6H_6O_2N_4S$ 2-Methylmercapto-6,8-dioxypurine (JOHNS and BAUMANN) 1913, 14, 386

$C_6H_7ON_5S$ 2-Methylmercapto-6-oxy-8-aminopurine (JOHNS and BAUMANN) 1913, 14, 387

2-Oxy-8-methylaminopurine (JOHNS)

1915, 21, 322

$C_6H_7O_2N_2Cl$ 2,6-Dioxy-4-chloromethyl-5-methylpyrimidine (JOHNSON and CHERNOFF) 1913, 14, 318

$C_6H_7O_2N_2Br$ 1,3-Dimethyl-5-bromouracil (JOHNSON and CLAPP) 1908-09, 5, 62

$C_6H_7O_5N_2Br$ Oxybromohydrothymine-4-carboxylic acid (JOHNSON) 1907, 3, 306

$C_6H_8ON_2S$ 2-Thio-3,5-dimethyl-6-oxypyrimidine (JOHNSON and CLAPP) 1908-09, 5, 56

$C_6H_8O_2N_2S$ 2-Thio-3-acetyl-4-methylhydantoin (JOHNSON) 1912, 11, 99

$C_6H_8O_2N_4S$ 1-Methyl-2-methylmercapto-4-amino-5-nitroso-6-oxypyrimidine (JOHNS and HENDRIX)

1915, 20, 158

$C_6H_8O_3N_2Br_2$ 1,3-Dimethyldibromooxyhydrouracil (JOHNSON and CLAPP) 1908-09, 5, 61

$C_6H_8N_3SI$ 2-Ethylmercapto-5-iodo-6-aminopyrimidine (JOHNSON and JOHNS) 1905-06, 1, 313

$C_6H_9ON_3S$ 2-Methylmercapto-4-amino-6-methoxypyrimidine (JOHNS and HENDRIX) 1915, 20, 156

1-Methyl-2-methylmercapto-4-amino-6-oxypyrimidine (JOHNS and HENDRIX) 1915, 20, 157

$C_6H_9O_3N_2Br$ 1-Methyl-5-bromo-4-oxyhydrothymine (JOHNSON and CLAPP) 1908-09, 5, 57

$C_6H_{10}ON_4S$	1-Methyl-2-methylmercapto-4,5-diamino-6-oxypyrimidine (JOHNS and HENDRIX)	1915, 20, 159
$C_6H_{10}O_2N_2Cl$	Ethylenebischloroacetamide (JACOBS and HEIDELBERGER)	1915, 21, 151
$C_6H_{12}ONCl$	Chloroacetdiethylamide (JACOBS and HEIDELBERGER)	1915, 21, 149
$C_6H_{12}O_2NCl$	β -Chloroacetylamino- γ -butanol (JACOBS and HEIDELBERGER)	1915, 21, 428
	δ -Chloroacetylamino- n -butanol (JACOBS and HEIDELBERGER)	1915, 21, 427
	Chloroacetylethylaminoethanol (JACOBS and HEIDELBERGER)	1915, 21, 417
	Chloroacetylaminoethyl ethyl ether (JACOBS and HEIDELBERGER)	1915, 21, 415
$C_6H_{12}O_5NCl$	Xylohexosaminic acid lactone hydrochloride (LEVENE and LA FORGE)	1915, 21, 355
$C_6H_{16}ONCl$	α -Methylcholine chloride, chloroplatinate, chloraurate (MENGE)	1911-12, 10, 400
$C_6H_{18}O_{24}P_6$	Inosite hexaphosphate, tribarium and pentabarium salts (ANDERSON)	1914, 17, 147, 160, 167, 178

C₆ V

$C_6H_6N_2SCl$	2-Ethylmercapto-5-iodo-6-chloropyrimidine (JOHNSON and JOHNS)	1905-06, 1, 313
$C_6H_7ON_2SI$	2-Ethylmercapto-5-iodo-6-oxypyrimidine (JOHNSON and JOHNS)	1905-06, 1, 310

C₇ Group**C₇ II**

$C_7H_{16}O_7$	<i>d</i> - β -Galaheptite (PEIRCE)	1915, 23, 335
	<i>d</i> - β -Mannoheptite (PEIRCE)	1915, 23, 334

C₇ III

C_7H_6ClBr	<i>o</i> -Bromobenzyl chloride (JACOBS and HEIDELBERGER)	1915, 20, 665
$C_7H_8ON_4$	2-Oxy-6,8-dimethylpurine (JOHNS)	1913, 14, 6
	2-Oxy-6,9-dimethylpurine, picrate (JOHNS)	1912, 12, 94
	2-Oxy-8,9-dimethylpurine, picrate (JOHNS)	1912, 12, 95
$C_7H_8O_2N_4$	2,8-Dioxy-1,6-dimethylpurine (JOHNS and BAUMANN)	1913-14, 16, 141
	2,8-Dioxy-1,7-dimethylpurine (JOHNS)	1914, 17, 6

C₇H₈O₂N₄—*continued*:

- 2,8-Dioxy-1,9-dimethylpurine (JOHNS)
1913, 14, 5; 1914, 17, 7
- 2,8-Dioxy-6,9-dimethylpurine (JOHNS)
1912, 11, 397
- 2,8-Dioxy-9-ethylpurine (JOHNS and HENDRIX)
1914, 19, 29
- C₇H₁₀O₂N₂** 1,3-Dimethylthymine (JOHNSON and CLAPP)
1908-09, 5, 59
- C₇H₁₀O₃N₄** 2-Oxy-4-methyl-5-nitro-6-ethylaminopyrimidine
(JOHNS and BAUMANN) 1913, 15, 122
- C₇H₁₁ON₃** 2-Oxy-4-methyl-6-ethylaminopyrimidine and hydro-
chloride (JOHNS and BAUMANN) 1913, 15, 121
- C₇H₁₁N₃S** 2-Ethylmercapto-6-methylaminopyrimidine (JOHNS)
1911, 9, 163
- C₇H₁₂ON₄** 2-Oxy-4-methyl-5-amino-6-ethylaminopyrimidine
(JOHNS and BAUMANN) 1913, 15, 123

C₇ IV

- C₇H₆O₈N₄S** Hypoxanthine-2-thioglycollic acid (JOHNS and Ho-
GAN) 1913, 14, 304
- C₇H₆O₄N₄S** 6,8-Dioxypurine-2-thioglycollic acid (JOHNS and
HOGAN) 1913, 14, 302
- C₇H₈ON₄S** 2-Oxy-6,9-dimethyl-8-thiopurine (JOHNS)
1915, 21, 323
- C₇H₈O₂N₄S** 1-Methyl-2-methylmercapto-6,8-dioxypurine
(JOHNS and HENDRIX) 1915, 20, 159
- C₇H₈O₃N₂S** 2-Methylmercapto-4-carboxyl-5-methyl-6-oxypyri-
midine (JOHNSON) 1907, 3, 302
- C₇H₁₀O₂N₂S** 2-Methylmercapto-5-ethoxy-6-oxypyrimidine
(JOHNSON and McCOLLUM) 1905-06, 1, 447
- C₇H₁₁O₃N₂Br** 1,3-Dimethyl-5-bromo-4-oxyhydrothymine
(JOHNSON and CLAPP) 1908-09, 5, 60
- C₇H₁₂ONCl** Chloroacetylperidide (JACOBS and HEIDELBERGER)
1915, 21, 150
- C₇H₁₄O₂NCl** γ -Chloroacetyl-amino- β -methyl- β -butanol (JACOBS
and HEIDELBERGER) 1915, 21, 431
- Chloroacetylaminomethylmethylethylcarbinol
(α -chloroacetyl-amino- β -methyl- β -butanol) (JACOBS
and HEIDELBERGER) 1915, 21, 430
- γ -Chloroacetyl-amino- β -pentanol (JACOBS and
HEIDELBERGER) 1915, 21, 429
- C₇H₁₇O₂N₂I** Iodoacetylamin ethanol trimethylamine salt (JA-
COBS and HEIDELBERGER) 1915, 21, 408
- C₇H₁₈ONCl** β -Dimethylcholine chloride, chloroplatinate
(MENGE) 1911-12, 10, 404

C₈ Group**C₈ II**

- C₈** *d*- α,α -Mannooctaric acid double lactone (PEIRCE)
1915, 23, 337
- N** Coniine, picrolonate (WARREN and WEISS)
1907, 3, 333

C₈ III

- C₄N₂** Glyoxylic acid *p*-nitrophenylhydrazone (DAKIN)
1908, 4, 237
- C₂Br₂** *p*-Bromophenoxyethyl bromide (JACOBS and HEI-
DELBERGER) 1915, 21, 444
- C₄N** 2-Methoxy-5-nitrobenzyl alcohol (JACOBS and HEI-
DELBERGER) 1915, 20, 675
- C₂N₄** 2-Oxy-6-methyl-9-ethylpurine (JOHNS and BAU-
MANN) 1913, 15, 517
2-Oxy-6,8,9-trimethylpurine (JOHNS)
1912, 12, 93
- C₂N₄** 2,8-Dioxy-6-methyl-9-ethylpurine (JOHNS and BAU-
MANN) 1913, 15, 124
2,8-Dioxy-1,7,9-trimethylpurine (JOHNS)
1914, 17, 4
- C₄N₂** 2,6-Dioxy-4-hydroxymethyl-5-methylpyrimidine
acetate (JOHNSON and CHERNOFF) 1913, 14, 318
Thymine-4-ethyl carboxylate (JOHNSON)
1907, 3, 306
- C₂N₄** Acetyl-2-oxy-4-methyl-5-amino-6-methylaminopyr-
imidine (JOHNS) 1912, 12, 92
- C₃N₂** 2,6-Dioxy-4-ethoxymethyl-5-methylpyrimidine
(JOHNSON and CHERNOFF) 1913, 14, 317
- N₃S** 2-Ethylmercapto-5-ethyl-6-aminopyrimidine (JOHN-
SON and MENGE) 1906-07, 2, 111
2-Ethylmercapto-6-ethylaminopyrimidine (JOHNS
and HENDRIX) 1914, 19, 27
2-Ethylmercapto-4-methyl-6-methylaminopyrimi-
dine (JOHNS) 1912, 11, 395
- C₂₄P₆** Dimethylphytate (ANDERSON) 1914, 17, 188

C₈ IV

- C₂Cl₃Br** 2,4,6-Trichlorophenoxyethyl bromide (JACOBS and
HEIDELBERGER) 1915, 21, 442
- C₄NBr** *o*-Nitrophenyl bromoacetate (JACOBS and HEIDEL-
BERGER) 1915, 21, 469
- C₃N₂Cl** *p*-Nitrochloroacetylaniline (JACOBS and HEIDEL-
BERGER) 1915, 21, 112

- C₈H₈O₂NCI** *m*-Chloroacetylaminophenol (JACOBS and HEIDELBERGER) 1915, 21, 132
- C₈H₈O₃NCI** 2-Methoxy-5-nitrobenzyl chloride (JACOBS and HEIDELBERGER) 1915, 20, 675
- 3-Nitro-4-methoxybenzyl chloride (JACOBS and HEIDELBERGER) 1915, 20, 676
- C₈H₁₀ONBr** *o*-Aminophenoxyethyl bromide and hydrobromide (JACOBS and HEIDELBERGER) 1915, 21, 447
- C₈H₁₀ON₄S** 2-Oxy-6-methyl-8-thio-9-ethylpurine (JOHNS and BAUMANN) 1913, 15, 519
- C₈H₁₁N₂SCl** 2-Ethylmercapto-5-ethyl-6-chloropyrimidine (JOHNSON and MENGE) 1906-07, 2, 110
- C₈H₁₂ON₂S** 1-Ethylmercapto-1,5-dimethyl-6-oxypyrimidine (JOHNSON and CLAPP) 1908-09, 5, 54
- 2-Ethylmercapto-3,5-dimethyl-6-oxypyrimidine (JOHNSON and CLAPP) 1908-09, 5, 55
- 2-Ethylmercapto-5-ethyl-6-oxypyrimidine (JOHNSON and MENGE) 1906-07, 2, 109
- C₈H₁₂O₂N₂S** 2-Ethylmercapto-5-ethoxy-6-oxypyrimidine (JOHNSON and McCOLLUM) 1905-06, 1, 441
- 2-Thio-4-ethoxymethyl-5-methyl-6-oxypyrimidine (JOHNSON and CHERNOFF) 1913, 14, 316
- C₈H₁₃ON₃S** 2-Ethylmercapto-5-ethoxy-6-aminopyrimidine (JOHNSON and McCOLLUM) 1905-06, 1, 444
- C₈H₁₄O₂N₂S** α -Ethyl- β -pseudoethylthioacrylic acid (JOHNSON and MENGE) 1906-07, 2, 110
- C₈H₁₆ON₆S** 2-Oxy-4-methyl-5-amino-6-ethylaminopyrimidine thiourea addition product (JOHNS and BAUMANN) 1913, 15, 519
- C₈H₁₇ON₄I** Oxyethylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 21, 465
- C₈H₁₈O₂NCI** Acetyl- α -methylcholine chloride (acetyl- β -methylethoxytrimethylammonium chloride), chloroplatinate, and chloraurate (MENGE) 1912-13, 13, 98
- C₈H₂₀ONCI** β,β -Methylethylcholine chloride, chloroplatinate (MENGE) 1911-12, 10, 405

C₈ V

- C₈H₅ONClBr₃** 2,4,6-Tribromochloroacetylaniline (JACOBS and HEIDELBERGER) 1915, 21, 111
- C₈H₇ONClI** *m*-Iodochloroacetylaniline (JACOBS and HEIDELBERGER) 1915, 21, 111
- C₈H₁₁ON₂SCl** 2-Ethylmercapto-5-ethoxy-6-chloropyrimidine (JOHNSON and McCOLLUM) 1905-06, 1, 443

C, Group

C, II

H_8O_2	Benzylglyoxal (DAKIN and DUDLEY)	1914, 18, 43
$H_{12}O_3$	2,4-Dimethoxybenzyl alcohol (JACOBS and HEIDELBERGER)	1915, 20, 678
$H_{16}O_4$	Ethyl methylethoxyacetoacetate (JOHNSON and CHERNOFF)	1913, 14, 315

C, III

$H_6O_2Br_4$	Tribromo- <i>p</i> -cresyl bromoacetate (JACOBS and HEIDELBERGER)	1915, 21, 469
H_7OBr_5	Tetrabromo- <i>p</i> -methylphenoxyethyl bromide (JACOBS and HEIDELBERGER)	1915, 21, 445
H_8OBr_4	Tribromo- <i>p</i> -methylphenoxyethyl bromide (tribromo- <i>p</i> -cresoxyethyl bromide) (JACOBS and HEIDELBERGER)	1915, 21, 444
H_8OS	1-Phenyl-2-thiohydantoin (BRAUTLECHT)	1911-12, 10, 143
H_9OI	<i>p</i> -Methylphenacyl iodide (JACOBS and HEIDELBERGER)	1915, 21, 456
	<i>p</i> -Tolyl iodomethyl ketone (JACOBS and HEIDELBERGER)	1915, 21, 456
$H_{11}OBr$	<i>m</i> -Methylphenoxyethyl bromide (JACOBS and HEIDELBERGER)	1915, 21, 440
$H_{11}O_2N$	Phenylalanine (JOHNSON and O'BRIEN)	1912, 12, 212
	—, picrolonate (LEVENE and VAN SLYKE)	1912, 12, 136
	<i>L</i> -Phenylalanine, picrolonate (LEVENE and VAN SLYKE)	1912, 12, 135
$H_{11}O_2N_3$	Propionic aldehyde <i>p</i> -nitrophenylhydrazone (DAKIN)	1908, 4, 236
$H_{11}O_2Cl$	2,3-Dimethoxybenzyl chloride (JACOBS and HEIDELBERGER)	1915, 20, 677
$H_{11}O_6N$	Tyrosine, picrolonate (LEVENE and VAN SLYKE)	1912, 12, 136
$H_{12}ON_4$	2-Oxy-6,8-dimethyl-9-ethylpurine (JOHNS and BAUMANN)	1913, 15, 518
$H_{13}ON$	Aminoethyl <i>o</i> -tolyl ether (<i>o</i> -methylphenoxyethylamine) (JACOBS and HEIDELBERGER)	1915, 21, 416
	α - <i>p</i> -Tolyl- α -oxyethylamine (JACOBS and HEIDELBERGER)	1915, 21, 432
$H_{15}N_3S$	2-Ethylmercapto-4-methyl-6-ethylaminopyrimidine (JOHNS and BAUMANN)	1913, 15, 121

C, IV

$C_9H_8O_4NCl$	3-Nitro-4-acetoxybenzyl chloride (JACOBS and HEIDELBERGER)	1915, 20, 672
	3-Nitro-6-acetoxybenzyl chloride (JACOBS and HEIDELBERGER)	1915, 20, 673
$C_9H_8O_4NBr$	Bromoethyl <i>p</i> -nitrobenzoate (JACOBS and HEIDELBERGER)	1915, 21, 450
$C_9H_8O_4NI$	3-Nitro-4-acetoxybenzyl iodide (JACOBS and HEIDELBERGER)	1915, 20, 672
$C_9H_8O_5N_4S_2$	6-Oxypurine-2,8-dithioglycollic acid (JOHNS and HOGAN)	1913, 14, 306
$C_9H_9O_3NCl_2$	3,5-Dichlorotyrosine (WHEELER, HOFFMAN, and JOHNSON)	1911-12, 10, 153
$C_9H_{10}ONCl$	Chloroacetylbenzylamine (JACOBS and HEIDELBERGER)	1915, 20, 686
	Chloroacetyl- <i>m</i> -toluidine (JACOBS and HEIDELBERGER)	1915, 21, 108
$C_9H_{10}O_2NCl$	<i>o</i> -Chloroacetylaminobenzyl alcohol (JACOBS and HEIDELBERGER)	1915, 21, 138
	Chloroacetyl- <i>o</i> -anisidine (JACOBS and HEIDELBERGER)	1915, 21, 134
	Chloroacetyl- <i>p</i> -anisidine (JACOBS and HEIDELBERGER)	1915, 21, 137
$C_9H_{10}O_2NBr$	2-Bromoethoxybenzamide (JACOBS and HEIDELBERGER)	1915, 21, 449
$C_9H_{10}O_3N_2Hg$	<i>p</i> -Methylnitrosoaminophenylmercuric acetate (JACOBS and HEIDELBERGER)	1915, 20, 519
$C_9H_{11}O_2NS$	Thiotyrosine and hydrochloride (JOHNSON and BRAUTLECHT)	1912, 12, 194
$C_9H_{11}O_2NHg$	3-Methyl-4-aminophenylmercuric acetate (JACOBS and HEIDELBERGER)	1915, 20, 519
$C_9H_{12}O_3N_2S$	2-Methylmercapto-4-carbethoxy-5-methyl-6-oxypyrimidine (JOHNSON)	1907, 3, 302
$C_9H_{17}O_2N_6Cl$	Chloroacetylurea and hexamethylenetetramine (JACOBS and HEIDELBERGER)	1915, 21, 151
$C_9H_{18}ON_5Cl$	Chloroacetmethylamide and hexamethylenetetramine (JACOBS and HEIDELBERGER)	1915, 21, 148
$C_9H_{18}ON_5I$	β -Iodopropionamide and hexamethylenetetramine (JACOBS and HEIDELBERGER)	1915, 21, 147
$C_9H_{18}O_2N_5Cl$	Oxymethylchloroacetamide and hexamethylenetetramine (JACOBS and HEIDELBERGER)	1915, 21, 406
$C_9H_{18}N_4ClBr$	γ -Chloropropylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER)	1915, 21, 465

ON_4I γ -Oxypropylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 21, 466

O_2NCl Propionyl- α -methylcholine chloride (propionyl- β -methylethoxytrimethylammonium chloride), chloroplatinate, and chloraurate (MENGE) 1912-13, 13, 105

C_9 V

NClI 5-Iodochloroacetyl-*o*-toluidine (JACOBS and HEIDELBERGER) 1915, 21, 111

C_{10} Group

C_{10} II

O_3 *p*-Methylphenylpyruvic acid (WAKEMAN and DAKIN) 1911, 9, 149

O_4 *p*-Methoxyphenylpyruvic acid (WAKEMAN and DAKIN) 1911, 9, 150

O_4 Oxyethyl anisate (JACOBS and HEIDELBERGER) 1915, 21, 470

N_2 Nicotine, picrolonate (WARREN and WEISS) 1907, 3, 333

C_{10} III

O_3N γ -Hydroxy- β -carboxyquinoline (HOMER) 1914, 17, 514

ON_3 2-Anilino-6-oxypyrimidine (JOHNSON and JOHNS) 1905-06, 1, 314

O_4N_3 4-*p*-Nitrobenzylhydantoin (JOHNSON and BRAUTLECHT) 1912, 12, 188

O_2N_2 *d*-Benzylhydantoin (DAKIN and DUDLEY) 1914, 17, 35

l-Benzylhydantoin (DAKIN and DUDLEY) 1914, 17, 36

Phenyldihydrouracil (DAKIN) 1910-11, 8, 38

O_3N_2 Tyrosinehydantoin (JOHNSON and BRAUTLECHT) 1912, 12, 187

d-p-Hydroxybenzylhydantoin (DAKIN) 1910-11, 8, 28

l-p-Hydroxybenzylhydantoin (DAKIN) 1910-11, 8, 31

dl-p-Hydroxybenzylhydantoin (DAKIN) 1910-11, 8, 30

- C₁₆H₁₁OBr** *p*-Ethylphenyl bromomethyl ketone (*p*-ethylphenacyl bromide (JACOBS and HEIDELBERGER) 1915, 21, 458
m-Xylyl bromomethyl ketone (JACOBS and HEIDELBERGER) 1915, 21, 458
o-Xylyl bromomethyl ketone (JACOBS and HEIDELBERGER) 1915, 21, 457
- C₁₆H₁₁O₂N₃** 4-*p*-Aminobenzylhydantoin, hydrochloride, and hydroiodide (JOHNSON and BRAUTLECHT) 1912, 12, 186
- C₁₈H₁₁O₂Br** Bromoethyl anisate (JACOBS and HEIDELBERGER) 1915, 21, 452
o-Carbomethoxyphenoxyethyl bromide (methyl 2-bromoethoxybenzoate) (JACOBS and HEIDELBERGER) 1915, 21, 448
- C₁₈H₁₂O₃N₂** *l*-β-Phenyl-α-uramidopropionic acid and strychnine salt (DAKIN and DUDLEY) 1914, 17, 33
d-β-Phenyl-α-uramidopropionic acid (DAKIN and DUDLEY) 1914, 17, 34
dl-β-Phenyl-α-uramidopropionic acid (DAKIN) 1909, 6, 241
Phenyl-β-uramidopropionic acid (DAKIN) 1910-11, 8, 38
- C₁₆H₁₂O₄N₂** Aminoisopropyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 425
γ-Aminopropyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 421
Oxyisopropyl *p*-nitrobenzamide (JACOBS and HEIDELBERGER) 1915, 21, 426
γ-Oxypropyl *p*-nitrobenzamide (JACOBS and HEIDELBERGER) 1915, 21, 422
- C₁₉H₁₃O₂N** *p*-Methylphenylalanine (DAKIN) 1911, 9, 155
- C₁₆H₁₃O₂N₃** *n*-Butyric aldehyde *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 237
Isobutyric aldehyde *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 237
Methylethyl ketone *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 238
- C₁₆H₁₃O₂Cl** 3-Methoxy-4-ethoxybenzyl chloride (JACOBS and HEIDELBERGER) 1915, 20, 680
- C₁₉H₁₃O₃N** *p*-Methoxyphenylalanine (methyltyrosine) (DAKIN) 1910-11, 8, 20
- C₁₉H₁₄NBr** *m*-Bromodiethylaniline (JACOBS and HEIDELBERGER) 1915, 21, 127
- C₁₉H₁₆ON₂** *p*-Dimethylaminophenylaminoethanol (JACOBS and HEIDELBERGER) 1915, 21, 420

$H_{16}O_7N_4$	Vicine (LEVENE and SENIOR)	1916, 25, 611
$H_{19}O_2Br$	sec.-Octyl bromoacetate (JACOBS and HEIDELBERGER)	1915, 21, 468

C₁₀ IV

$H_7O_2N_2Cl$	α -Chlorobenzalhydantoin (WHEELER, HOFFMAN, and JOHNSON)	1911-12, 10, 156
$H_7O_2N_2Br$	α -Bromobenzalhydantoin (WHEELER, HOFFMAN, and JOHNSON)	1911-12, 10, 154
$H_8O_2N_2S$	α -Mercaptobenzalhydantoin (WHEELER, HOFFMAN, and JOHNSON)	1911-12, 10, 155
$H_8O_2N_2Cl_2$	3,5-Dichlorotyrosinehydantoin (WHEELER, HOFFMAN, and JOHNSON)	1911-12, 10, 152
$H_9O_2NCl_2$	<i>m</i> -Chloroacetylaminomethylbenzoyl chloride (JACOBS and HEIDELBERGER)	1915, 20, 693
$H_9O_2NCl_2$	<i>p</i> -Chloroacetylaminophenyl chloroacetate (JACOBS and HEIDELBERGER)	1915, 21, 134
$H_{10}ON_2S$	2-Thio-4-benzylhydantoin (JOHNSON and O'BRIEN)	1912, 12, 211
$H_{10}O_2NCl$	<i>m</i> -Chloroacetylaminacetophenone (JACOBS and HEIDELBERGER)	1915, 21, 140
	ω -Chloroacetylaminacetophenone (JACOBS and HEIDELBERGER)	1915, 21, 472
$H_{10}O_2NBr$	<i>p</i> -Acetaminophenyl bromomethyl ketone (<i>p</i> -acetaminophenacyl bromide) (JACOBS and HEIDELBERGER)	1915, 21, 459
$H_{10}O_2N_2S$	Thiotyrosinehydantoin (JOHNSON and BRAUTLECHT)	1912, 12, 190
$H_{10}O_5NCl$	Chloroacetylaminomethyl benzoate (JACOBS and HEIDELBERGER)	1915, 21, 406
$H_{11}O_2N_2Cl$	Chloroacetylbenzylurea (JACOBS and HEIDELBERGER)	1915, 21, 152
	<i>m</i> -Chloroacetylaminomethylbenzamide (JACOBS and HEIDELBERGER)	1915, 20, 694
$H_{11}O_3N_2Br$	γ -Bromopropyl- <i>p</i> -nitrobenzamide (JACOBS and HEIDELBERGER)	1915, 21, 421
$H_{11}O_4N_2Cl$	2-Methoxy-5-nitrochloroacetylbenzylamine (JACOBS and HEIDELBERGER)	1915, 20, 691
$H_{12}ONCl$	Chloroacetyl- <i>o</i> -methylbenzylamine (JACOBS and HEIDELBERGER)	1915, 20, 686
$H_{12}ONCl_3$	2,4,6-Trichlorophenoxyethyldimethylamine (JACOBS and HEIDELBERGER)	1915, 21, 443
$H_{12}O_2NCl$	Chloroacetylphenylaminoethanol (JACOBS and HEIDELBERGER)	1915, 21, 418
	α -Phenyl- α -oxy- β -chloroacetylaminethane (JACOBS and HEIDELBERGER)	1915, 21, 431

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| $C_{19}H_{12}O_2NBr$ | <i>o</i> -Acetaminophenoxyethyl bromide (JACOBS and HEIDELBERGER) | 1915, 21, 446 |
| | Bromoacetylphenylaminoethanol (JACOBS and HEIDELBERGER) | 1915, 21, 419 |
| $C_{16}H_{12}O_2NI$ | α -Iodopropionyl- <i>o</i> -anisidine (JACOBS and HEIDELBERGER) | 1915, 21, 135 |
| | β -Iodopropionyl- <i>o</i> -anisidine (JACOBS and HEIDELBERGER) | 1915, 21, 136 |
| $C_{19}H_{12}O_3N_4S$ | 2-Oxy-6-methyl-9-ethylpurine-8-thioglycollic acid (JOHNS and BAUMANN) | 1913, 15, 520 |
| $C_{19}H_{13}ON_2Cl$ | <i>m</i> -Chloroacetylaminodimethylaniline (JACOBS and HEIDELBERGER) | 1915, 21, 113 |
| $C_{19}H_{14}O_3N_5P$ | Guanylic acid, barium and brucine salts (LEVENE and JACOBS) | 1912, 12, 424 |
| | (JONES and RICHARDS) | 1915, 20, 33 |
| $C_{19}H_{17}O_{12}N_5P_2$ | Hexocytidine diphosphoric acid, barium and brucine salts (LEVENE and JACOBS) | 1912, 12, 419 |
| $C_{19}H_{19}O_2N_4Br$ | Acetoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) | 1915, 21, 449 |
| $C_{10}H_{19}O_2N_6Cl$ | Chloroacetylmethylurea and hexamethylenetetramine (JACOBS and HEIDELBERGER) | 1915, 21, 151 |
| $C_{19}H_{20}ON_5Cl$ | Chloroacetdimethylamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) | 1915, 21, 148 |
| | Chloroacetethylamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) | 1915, 21, 149 |
| $C_{10}H_{20}O_2N_5I$ | Iodoacetylaminopropanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) | 1915, 21, 408 |

C₁₁ Group

C₁₁ II

- C₁₁H₂₃I** Undecylic iodide (LEVENE, WEST, ALLEN, and VAN DER SCHEER) 1915, 23, 72

C₁₁ III

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|---------------------|---|-----------------|
| $C_{11}H_{11}ON_3$ | 2-Oxy-6-methylphenylaminopyrimidine (JOHNSON and CLAPP) | 1908-09, 5, 64 |
| $C_{11}H_{11}O_3N$ | Cinnamoylglycocoll (DAKIN) | 1908-09, 5, 305 |
| $C_{11}H_{11}O_4Br$ | Bromoethyl acetylsalicylate (JACOBS and HEIDELBERGER) | 1915, 21, 451 |

- O_3N_2 *p*-Methoxybenzylhydantoin (WHEELER, HOFFMAN, and JOHNSON) 1911-12, 10, 156
 OBr Mesityl bromomethyl ketone (2,4,6-trimethylphenyl bromide) (JACOBS and HEIDELBERGER) 1915, 21, 459
 O_2Cl 2-Acetoxy-3,5-dimethylbenzyl chloride (*o*-acetoxy-mesityl pseudochloride) (JACOBS and HEIDELBERGER) 1915, 20, 670
 O_3N Phenylpropionylglycocoll (DAKIN) 1908, 4, 431
 O_4N Phenyl- β -oxypropionylglycocoll (DAKIN) 1908-09, 5, 308
 O_3N *p*-Methyl- α -uramidophenylpropionic acid (DAKIN) 1911, 9, 159
 O_2N_3 Isovaleric aldehyde *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 237
Methylisopropyl ketone *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 238
 O_3N_5 Adenine hexose compound (MANDEL and DUNHAM) 1912, 11, 85
 O_6N_3 *d*-Lyxose *p*-nitrophenylhydrazone (LEVENE and LA FORGE) 1914, 18, 326
 O_6N_5 Guanine hexoside from thymus nucleic acid (LEVENE and JACOBS) 1912, 12, 378
 N_5O_5 Arginine-glutaminic acid dipeptide from gelatin (LEVENE and BIRCHARD) 1912-13, 13, 285

C₁₁ IV

- $\text{O}_3\text{N}_2\text{S}$ 2-Thio-4-piperonalhydantoin (JOHNSON and O'BRIEN) 1912, 12, 213
 N_2Cl 6-Chloroacetylaminquinoline and hydrochloride (JACOBS and HEIDELBERGER) 1915, 21, 143
 $\text{O}_2\text{N}_2\text{S}$ 2-Thio-4-anisalhydantoin (JOHNSON and O'BRIEN) 1912, 12, 212
 $\text{O}_3\text{N}_2\text{S}$ 1-Phenyl-2-thiohydantoin-4-acetic acid (BRAUTLECHT) 1911-12, 10, 145
 $\text{O}_2\text{N}_3\text{S}$ 1-Phenyl-2-thiohydantoin-4-acetamide (BRAUTLECHT) 1911-12, 10, 145
 O_3NBr_2 Phenyl- α , β -dibromopropionylglycocoll (DAKIN) 1908-09, 5, 307
 $\text{O}_5\text{N}_2\text{Cl}$ 2-Acetoxy-5-nitrochloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 690
Chloroacetylaminethyl *m*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 411
Chloroacetylaminethyl *o*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 410
Chloroacetylaminethyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 411

- $C_{11}H_{12}ON_2S$ 1-Phenyl-4-ethyl-2-thiohydantoin (BRAUTLECHT)
1911-12, 10, 143
- $C_{11}H_{12}O_2NBr$ 3-Acetamino-4-tolyl bromomethyl ketone (3-acetamino-4-methylphenacyl bromide) (JACOBS and HEIDELBERGER) 1915, 21, 460
- $C_{11}H_{12}O_2NCl$ Chloroacetylaminomethyl benzoate (JACOBS and HEIDELBERGER) 1915, 21, 408
- $C_{11}H_{12}O_4NCl$ Chloroacetylaminomethyl anisate (JACOBS and HEIDELBERGER) 1915, 21, 406
- $C_{11}H_{12}O_4NBr$ Phenyl- α -bromo- β -oxypropionylglycocoll (DAKIN)
1908-09, 5, 307
- $C_{11}H_{13}O_2N_2I$ *p*-Acetaminoiodoacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 687
- $C_{11}H_{13}O_3N_2Cl$ Chloroacetylaminomethyl *p*-aminobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 412
- $C_{11}H_{13}O_6N_3S$ Hydantoic acid, $C_6H_5NHCSNHCH(COOH)CH_2CONH_2$, and potassium salt (BRAUTLECHT)
1911-12, 10, 145
- $C_{11}H_{14}O_2NCl$ Chloroacetylaminomethyl *o*-tolyl ether (JACOBS and HEIDELBERGER) 1915, 21, 416
- α -*p*-Tolyl- α -oxy- β -chloroacetylaminomethane (JACOBS and HEIDELBERGER) 1915, 21, 433
- $C_{11}H_{14}O_2NCl$ 1,2-Dimethylchloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 692
- $C_{11}H_{15}O_4N_2Br$ *d*-Lyxose *p*-bromophenylhydrazone (LEVENE and LA FORGE) 1914, 18, 325
- Urine pentose *p*-bromophenylhydrazone (LEVENE and LA FORGE) 1914, 18, 322
- $C_{11}H_{18}O_{13}N_3P_2$ Hexothymidine diphosphoric acid, barium and brucine salts (LEVENE and JACOBS)
1912, 12, 417
- $C_{11}H_{20}O_3N_5Cl$ Chloroacetylurethane and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 152
- $C_{11}H_{21}O_2N_4I$ Carbethoxyethylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER)
1915, 21, 467
- $C_{11}H_{22}O_2N_5Cl$ Chloroacetylaminoisopropanol and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 425
- $C_{11}H_{24}O_2NCl$ Valeryl- α -methylcholine chloride (valeryl- β -methylethoxytrimethylammonium chloride), chloroplatinate, and chloraurate (MENGE)
1912-13, 13, 106

C₁₁ V

- $C_{11}H_{11}O_3NClBr$ Phenyl- α -bromo- β -chloropropionylglycocoll (DAKIN)
1908-09, 5, 308

C₁₂ Group**C₁₂ II**

- O₂** β -Methoxy- α -naphthobenzyl alcohol (JACOBS and HEIDELBERGER) 1915, 20, 674
- N₂** *p*-Aminodipropylaniline (JACOBS and HEIDELBERGER) 1915, 21, 116
- I** Dodecyl iodide (LEVENE and WEST) 1914, 18, 478

C₁₂ III

- OBr** α -Naphthyl bromoethyl ether (α -naphthoxyethyl bromide) (JACOBS and HEIDELBERGER) 1915, 21, 441
- ON₂** 2-Oxy-3-methyl-6-methylphenylaminopyrimidine (JOHNSON and CLAPP) 1908-09, 5, 65
- O₄Br** Bromoethyl acetyl-*p*-cresotinate (JACOBS and HEIDELBERGER) 1915, 21, 452
- O₅Cl** Chloroacetyloxyethyl anisate (JACOBS and HEIDELBERGER) 1915, 21, 471
- O₂N** Acetyl-*p*-methylphenylalanine (DAKIN) 1911, 9, 158
- O₂N₂** 3-Nitro-4-oxybenzylpiperidine (JACOBS and HEIDELBERGER) 1915, 20, 669
- ON₂** 3-Amino-4-oxybenzylpiperidine and hydrochloride (JACOBS and HEIDELBERGER) 1915, 20, 669
- p*-Nitrosodipropylaniline (JACOBS and HEIDELBERGER) 1915, 21, 115
- NO₁₁** Chondrosin (LEVENE and LA FORGE) 1913, 15, 73; 1914, 18, 239
- O₄₁P₁₀** Di-inosite triphosphoric acid ester and pentabarium salt (ANDERSON) 1912, 12, 112

C₁₂ IV

- ONBr** β -(ω -Bromoacetyl)-quinaldine (JACOBS and HEIDELBERGER) 1915, 21, 463
- O₂N₂Cl** *p*-Nitrobenzylpyridinium chloride (JACOBS and HEIDELBERGER) 1915, 20, 667
- O₂N₂S** 2-Thio-3-acetyl-4-benzylhydantoin (JOHNSON and O'BRIEN) 1912, 12, 211
- O₂N₂S** 1-Phenyl-2-thiohydantoin-4-propionic acid (BRAUTLECHT) 1911-12, 10, 146
- N₂SI** 2-Ethylmercapto-5-iodo-6-anilinopyrimidine (JOHNSON and JOHNS) 1905-06, 1, 314

- C₁₂H₁₃O₅N₂Cl** Chloroacetylaminoisopropyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 425
 γ-Chloroacetylaminopropyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 423

-Nitrobenzoylaminoisopropyl chloroacetate (JACOBS and HEIDELBERGER) 1915, 21, 426
 γ-*p*-Nitrobenzoylaminoisopropyl chloroacetate (JACOBS and HEIDELBERGER) 1915, 21, 422
- C₁₂H₁₄ON₂S** 1-Phenyl-4-isopropyl-2-thiohydantoin (BRAT-LECHT) 1911-12, 10, 144
- C₁₂H₁₄O₂NI** 3-Acetamino-4-tolyl ω-iodoethyl ketone (3-acetamino-4-methyl-ω-iodopropiophenone) (JACOBS and HEIDELBERGER) 1915, 21, 461
- C₁₂H₁₄O₃NCl** Chloroacetylaminethyl *o*-toluate (JACOBS and HEIDELBERGER) 1915, 21, 409
 Chloroacetylaminethyl *p*-toluate (JACOBS and HEIDELBERGER) 1915, 21, 409
- C₁₂H₁₄O₃NI** *m*-Iodoacetylaminomethylbenzoic acid ethyl ester (JACOBS and HEIDELBERGER) 1915, 20, 693
- C₁₂H₁₄O₄NCl** Chloroacetylaminethyl anisate (JACOBS and HEIDELBERGER) 1915, 21, 414
- C₁₂H₁₅O₂N₂Cl** 1-Methyl-2-acetaminochloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 688
 1-Methyl-4-acetaminochloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 688
- C₁₂H₁₇ON₂Cl** *p*-Chloroacetylaminodiethylaniline (JACOBS and HEIDELBERGER) 1915, 21, 115
- C₁₂H₁₈O₂N₂Cl** Chloroacetyl-*p*-dimethylaminophenylaminoethanol (JACOBS and HEIDELBERGER) 1915, 21, 420
- C₁₂H₂₄ON₆Cl** Chloroacetdiethylamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 149
- C₁₂H₂₄O₂N₆Cl** β-Chloroacetylaminog-γ-butanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 429
 δ-Chloroacetylaminog-*n*-butanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 427
 Chloroacetylaminethyl ethyl ether and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 416

C₁₂ V

- O₂NCIBr** Bromoethyl *m*-chloroacetylaminioethylbenzoate
(JACOBS and HEIDELBERGER) 1915, 21, 452
- O₂NCIBr** α -Bromoisocapronyl- α -methylcholine chloride
(α -bromoisocapronyl- β -methylethoxytrimethylammonium chloride) and chlorplatinate (MENGE)
1912-13, 13, 107

C₁₂ Group**C₁₂ II**

- O₂** Tridecylic acid (LEVENE and WEST)
1914, 18, 465
(LEVENE, WEST, ALLEN, and VAN DER SCHEER)
1915, 23, 73
- I** Tridecylic iodide (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 528

C₁₂ III

- O₃Cl** 2-Oxy-3-carbomethoxynaphthobenzyl chloride (JACOBS and HEIDELBERGER) 1915, 20, 682
- N₄Cl₂** *o*-Chlorobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 665
- p*-Chlorobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 665
- O₃N₃** *d*- β -Mannoheptose *p*-nitrophenylhydrazone (PEIRCE) 1915, 23, 333
- ON₂** *o*-Aminophenoxyethylpiperidine and hydrochloride (JACOBS and HEIDELBERGER)
1915, 21, 448
- O₇N₂** *d*- β -Mannoheptonic acid phenylhydrazide (PEIRCE)
1915, 23, 331

C₁₂ IV

- O₃NCI** Chloroacetylaminioethyl cinnamate (JACOBS and HEIDELBERGER) 1915, 21, 415
- O₃N₂S₂** *p*-Ethylxanthogenate-4-benzylhydantoin (JOHNSON and BRAUTLECHT) 1912, 12, 189
- O₅NCI** Chloroacetylaminioethyl acetylsalicylate (JACOBS and HEIDELBERGER) 1915, 21, 414
- 1,2-Diacetoxychloroacetylbenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 691

- C₁₃H₁₅O₅N₂Cl** β -Chloroacetyl-amino- γ -butyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 429
 δ -Chloroacetylaminobutyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 428
 Chloroacetylethylaminoethyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 417
- C₁₃H₁₆ONCl₃** 2,4,6-Trichlorophenoxyethylpiperidine and hydrochloride (JACOBS and HEIDELBERGER) 1915, 21, 443
- C₁₃H₁₇ON₄Br₃** 2-Oxy-3,5-dibromobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 20, 670
- C₁₃H₁₇O₄N₆Cl** 2,4-Dinitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 667
- C₁₃H₁₈O₂N₅Cl** *m*-Nitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 666
o-Nitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 666
p-Nitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 666
- C₁₃H₁₈O₃N₅Cl** 2-Oxy-5-nitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 671
- C₁₃H₁₈O₄NCl** γ -Chloroacetylaminopropyl anisate (γ -chloroacetylaminopropyl *p*-methoxybenzoate) (JACOBS and HEIDELBERGER) 1915, 21, 423
- C₁₃H₁₈N₄ClBr** *o*-Bromobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 665
p-Bromobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 665
- C₁₃H₁₈N₄BrI** *o*-Iodobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 467
p-Iodobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 20, 665
- C₁₃H₂₀O₂NCl** Benzoyl- α -methylcholine chloride (benzoyl- β -methylethoxytrimethylammonium chloride), chloroplatinate, and chloroaurate (MENGE) 1912-13, 13, 99

- $\text{C}_6\text{H}_{11}\text{N}_5\text{Cl}$ Chloroacetyl piperidide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 150
- $\text{C}_8\text{H}_{17}\text{N}_5\text{Cl}$ γ -Chloroacetyl amino- β -methyl- β -butanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 431
- Chloroacetyl aminomethylmethylethyl carbinol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 430
- γ -Chloroacetyl amino- β -pentanol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 430

C₁₄ Group**C₁₄ II**

- $\text{C}_{14}\text{H}_{24}\text{O}_4$ Undecylmalonic acid (LEVENE, WEST, ALLEN, and VAN DER SCHEER) 1915, 23, 73

C₁₄ III

- $\text{C}_{14}\text{H}_{11}\text{N}_3$ Phenylglyoxylic acid *p*-nitrophenylhydrazone (DAKIN and DUDLEY) 1913, 15, 139
- $\text{C}_{14}\text{H}_{17}\text{N}_2$ 3-Nitro-4-acetoxybenzyl piperidine and hydrochloride (JACOBS and HEIDELBERGER) 1915, 20, 669
- $\text{C}_{14}\text{H}_{17}\text{N}_5\text{Cl}$ *o*-Cyanobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 666
- p*-Cyanobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 666
- $\text{C}_{14}\text{H}_{17}\text{N}_4\text{Cl}$ *m*-Methylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 663
- o*-Methylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 663
- p*-Methylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 663
- $\text{C}_{14}\text{H}_{17}\text{N}_4\text{I}$ Phenylethylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 21, 467

C₁₄ IV

- $\text{C}_{14}\text{H}_{11}\text{N}_3\text{Cl}$ *p*-Chloroacetyl aminoazobenzene (JACOBS and HEIDELBERGER) 1915, 21, 117
- $\text{C}_{14}\text{H}_{11}\text{N}_3\text{Cl}$ Benzeneazo-*m*-chloroacetyl aminophenol (JACOBS and HEIDELBERGER) 1915, 21, 133
- $\text{C}_{14}\text{H}_{11}\text{N}_2\text{Hg}$ 4-*p*-Oxybenzeneazophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 516

- $C_{14}H_{12}O_4N_2Hg$ 4-*o,p*-Dioxybenzeneazophenylmercuric acetate
(JACOBS and HEIDELBERGER) 1915, 20, 517
- $C_{14}H_{18}ONBr_3$ Tribromo-*p*-methoxyethylpiperidine (JACOBS and HEIDELBERGER) 1915, 21, 445
- $C_{14}H_{18}O_3N_5Br$ *m*-Nitrophenacylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 459
- $C_{14}H_{18}O_4N_5Br$ *o*-Nitrophenyl bromoacetate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 470
- $C_{14}H_{19}ON_5Cl_2$ Chloroacetyl-*o*-chloroaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 110
- $C_{14}H_{19}O_2N_4Cl$ 3-Aldehydo-4-oxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 683
- 3,4-Methylenedioxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 677
- $C_{14}H_{19}O_2N_4Br$ Phenylbromoacetate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 469
- $C_{14}H_{19}O_3N_4Cl$ 3-Carboxy-4-oxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 681
- $C_{14}H_{19}O_3N_6Cl$ *m*-Nitrochloroacetylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 112
- $C_{14}H_{20}ON_4Br_2$ *p*-Bromophenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 444
- $C_{14}H_{20}ON_5Cl$ *p*-Aminophenacylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 21, 460
- Chloroacetylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 104
- $C_{14}H_{20}ON_5Br$ ω -Bromoacetophenoneoxime and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 456
- Bromoacetylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 104
- $C_{14}H_{20}O_2N_5Cl$ *m*-Chloroacetylaminophenol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 133
- o*-Chloroacetylaminophenol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 131

- I₂₀O₃N₅Cl** 2-Methoxy-5-nitrobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 676
- 3-Nitro-4-methoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 676
- I₂₀O₅N₃Cl** Chloroacetylaminethyl *p*-nitrobenzoate and trimethylamine (JACOBS and HEIDELBERGER)
1915, 21, 412
- I₂₁ON₂Cl** *p*-Chloroacetylaminodipropylaniline (JACOBS and HEIDELBERGER)
1915, 21, 116
- I₂₁ON₄Br** Phenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER)
1915, 21, 440
- I₂₁ON₄Cl** *o*-Methoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 673
- p*-Methoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 673
- I₂₂O₂NCl** Phenylacetyl- γ -homocholine chloride, chloroplatinate, and chloroaurate (MENGE)
1912-13, 13, 104
- Phenylacetyl- α -methylcholine chloride (phenylacetyl- β -methylethoxytrimethylammonium chloride), chloroplatinate, and chloroaurate (MENGE)
1912-13, 13, 101
- Phenylacetyl- β -methylcholine chloride (phenylacetyl- β -oxypropyltrimethylammonium chloride), chloroplatinate, and chloroaurate (MENGE)
1912-13, 13, 102

C₁₄ V

- I₁₉ON₅ClBr** *p*-Bromochloroacetylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 110
- I₁₉ON₅ClI** *m*-Iodochloroacetylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 111

C₁₅ Group**C₁₅ II**

- I₁₂O₅** Baptisol (CLARK) 1915, 21, 650

C₁₅ III

- C₁₅H₁₄O₅N₆ Glyceric aldehyde *p*-nitrophenylhydrazone (DAKIN and DUDLEY) 1913, 15, 138
- C₁₅H₁₈O₃N₂ Diazobenzalglucosaminic acid ethyl ester (LEVENE and LA FORGE) 1915, 21, 349
- C₁₅H₂₃N₄Cl 3,5-Dimethylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 663

C₁₅ IV

- C₁₅H₁₁O₃N₂Cl *o*-Chloroacetylaminophenyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 132
- C₁₅H₁₂O₃NCl *o*-Chloroacetylaminophenyl benzoate (JACOBS and HEIDELBERGER) 1915, 21, 131
- C₁₅H₁₃O₃NHg 4-*o*-Oxybenzylideneaminophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 518
- C₁₅H₁₄O₅NCl β-Acetoxy-α-chloroacetylnaphthobenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 689
- Chloroacetyl aminoethyl β-naphthoate (JACOBS and HEIDELBERGER) 1915, 21, 410
- C₁₅H₁₄O₃NI β-Acetoxy-α-iodoacetylnaphthobenzylamine (JACOBS and HEIDELBERGER) 1915, 20, 689
- C₁₅H₁₄O₃N₂Hg 3-Methyl-4-*p*-oxybenzeneazophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 520
- C₁₅H₁₅ON₂Cl β-Chloroacetyl-α,α-phenylbenzylhydrazine (JACOBS and HEIDELBERGER) 1915, 21, 474
- C₁₅H₁₉O₂N₄Br₃ 2-Acetoxy-3,5-dibromobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 20, 671
- 4-Acetoxy-3,5-dibromobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 20, 671
- C₁₅H₂₀ON₄Br₄ Tribromo-*p*-methylphenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 445
- C₁₅H₂₀O₄N₅Br *p*-Nitrobenzoyloxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 450
- C₁₅H₂₀O₄N₅I 3-Nitro-4-acetoxybenzylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 20, 673
- p*-Nitrobenzoyloxyethylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 21, 451

- $\text{H}_{21}\text{ON}_4\text{Br}$ *p*-Methylphenacylhexamethylenetetraminium
bromide (JACOBS and HEIDELBERGER) 1915, 21, 456
- $\text{H}_{21}\text{ON}_4\text{I}$ *p*-Methylphenacylhexamethylenetetraminium io-
dide (JACOBS and HEIDELBERGER) 1915, 21, 457
- $\text{H}_{21}\text{O}_2\text{N}_4\text{Br}$ Benzoyloxyethylhexamethylenetetraminium bro-
mide (JACOBS and HEIDELBERGER) 1915, 21, 450
- p*-Methoxyphenacylhexamethylenetetraminium
bromide (JACOBS and HEIDELBERGER) 1915, 21, 462
- $\text{H}_{21}\text{O}_3\text{N}_2\text{Cl}$ Diethylaminoethyl *p*-chloroacetylaminobenzoate
(chloroacetyl novocain) (JACOBS and HEIDELBERGER) 1915, 21, 139
- $\text{H}_{21}\text{O}_3\text{N}_4\text{Cl}$ 3-Carbomethoxy-4-oxybenzylhexamethylenetet-
raminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 681
- 2-Methoxy-5-carboxybenzylhexamethylenetetra-
minium chloride (JACOBS and HEIDELBERGER) 1915, 20, 682
- 2-Oxy-3-carboxy-5-methylbenzylhexamethylene-
tetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 681
- 2-Oxy-3-methoxy-5-aldehydobenzylhexamethyl-
enetetraminium chloride (JACOBS and HEIDELBER-
GER) 1915, 20, 683
- $\text{H}_{21}\text{O}_3\text{N}_6\text{Cl}$ *m*-Nitrochloroacetyl-*p*-toluidine and hexamethyl-
enetetramine (JACOBS and HEIDELBERGER) 1915, 21, 112
- $\text{H}_{22}\text{ON}_5\text{Cl}$ *o*-Acetaminobenzylhexamethylenetetraminium
chloride (JACOBS and HEIDELBERGER) 1915, 20, 668
- p*-Acetaminobenzylhexamethylenetetraminium
chloride (JACOBS and HEIDELBERGER) 1915, 20, 668
- Chloroacetylbenzylamine and hexamethylenetet-
ramine (JACOBS and HEIDELBERGER) 1915, 20, 686
- Chloroacetylmethylaniline and hexamethylenetet-
ramine (JACOBS and HEIDELBERGER) 1915, 21, 105
- Chloroacetyl-*m*-toluidine and hexamethylenetet-
ramine (JACOBS and HEIDELBERGER) 1915, 21, 108

C₁₅H₂₂ON₅Cl—*continued*:

Chloroacetyl-*o*-toluidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 107

Chloroacetyl-*p*-toluidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 108

C₁₅H₂₂O₂N₅Cl *o*-Chloroacetylaminobenzyl alcohol and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 138

Chloroacetyl-*o*-anisidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 135

Chloroacetyl-*p*-anisidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 138

C₁₅H₂₂O₄N₅Cl 2-Nitro-3,4-dimethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)

1915, 20, 679

C₁₅H₂₂O₂NCl Monobenzalglucosaminic acid ethyl ester hydrochloride (LEVENE and LA FORGE)

1915, 21, 348

C₁₅H₂₃ON₄Cl *o*-Ethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)

1915, 20, 677

C₁₅H₂₃ON₄Br *m*-Methylphenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER)

1915, 21, 441

o-Methylphenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER)

1915, 21, 440

p-Methylphenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER)

1915, 21, 441

C₁₅H₂₃O₂N₄Cl 2,3-Dimethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)

1915, 20, 678

3,4-Dimethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)

1915, 20, 678

C₁₅ V

C₁₅H₂₁ON₅ClI 5-Iodochloroacetyl-*o*-toluidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)

1915, 21, 112

C₁₆ Group

- Hexadecane (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 523

C₁₆ II

- N₄ *p*-Aminobenzeneazodiethylaniline (JACOBS and HEIDELBERGER)
1915, 21, 123

C₁₆ III

- O₄N₃ 1-Phenyl-4-*p*-nitrobenzalhydantoin (JOHNSON and BRAUTLECHT)
1912, 12, 184
O₂N₃ 1-Phenyl-4-*p*-aminobenzalhydantoin, hydrochloride, hydroiodide, nitrate, and sulfate (JOHNSON and BRAUTLECHT)
1912, 12, 184
O₄N₂ Salicylamide ethylene ether (JACOBS and HEIDELBERGER)
1915, 21, 449

C₁₆ IV

- O₃N₃S 1-Phenyl-2-thio-4-*p*-nitrobenzalhydantoin (JOHNSON and BRAUTLECHT)
1912, 12, 182
ON₂S 1-Phenyl-4-benzyl-2-thiohydantoin (BRAUTLECHT)
1911-12, 10, 144
O₂NCI Chloroacetyl- ω -anilinoacetophenone (JACOBS and HEIDELBERGER)
1915, 21, 106
O₂N₂S 1-Phenyl-4-*p*-hydroxybenzyl-2-thiohydantoin (BRAUTLECHT)
1911-12, 10, 144
O₃NCI *o*-Chloroacetylaminobenzyl benzoate (JACOBS and HEIDELBERGER)
1915, 21, 139
O₂N₂CI Chloroacetylphenylglycineanilide (JACOBS and HEIDELBERGER)
1915, 21, 106
ON₃CI Chloroacetylaminooazotoluene (*o*-tolueneazochloroacetyl-*o*-toluidine) (JACOBS and HEIDELBERGER)
1915, 21, 118
O₂NCI α,β -Diphenylchloroacetylaminooethanol (JACOBS and HEIDELBERGER)
1915, 21, 434
 α,β -Isodiphenylchloroacetylaminooethanol (JACOBS and HEIDELBERGER)
1915, 21, 435
O₃N₅CI 4-Nitrobenzeneazo-2'-chloroacetyl-amino-4'-dimethylaminobenzene (JACOBS and HEIDELBERGER)
1915, 21, 129
ON₄CI Benzeneazo-2'-chloroacetyl-amino-4'-dimethylaminobenzene (JACOBS and HEIDELBERGER)
1915, 21, 128
p-Chloroacetylaminobenzeneazodimethylaniline (JACOBS and HEIDELBERGER)
1915, 21, 122

- C₁₆H₁₇O₂N₃Hg** 4-*p*-Dimethylaminobenzeneazophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 516
- C₁₆H₂₂O₂N₅Cl** ω -Chloroacetylaminacetophenone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 472
- C₁₆H₂₂O₂N₅Br** *p*-Acetaminophenacylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 460
- C₁₆H₂₃ON₄Br** *p*-Ethylphenacylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 459
- m*-Xylyl bromomethyl ketone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 458
- o*-Xylyl bromomethyl ketone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 458
- C₁₆H₂₃O₂N₄Br** *p*-Ethoxyphenacylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 463
- C₁₃H₂₃O₂N₅Cl** *m*-Chloroacetylaminacetophenone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 141
- C₁₆H₂₃O₂N₆Cl** β -Acetyl- α -chloroacetyl- α -phenylhydrazine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 474
- m*-Chloroacetylaminomethylbenzamide and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 694
- Chloroacetylbenzylurea and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 152
- C₁₆H₂₃O₃N₂Cl** *m*-Chloroacetylaminomethylbenzoic acid diethylaminoethyl ester (JACOBS and HEIDELBERGER) 1915, 20, 693
- C₁₆H₂₃O₃N₄Cl** 2-Methoxy-5-carbomethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 683
- C₁₆H₂₄ON₅Cl** Chloroacetyl-*o*-methylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 686
- Chloroacetyl-*m*-4-xylidine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 109

- $C_{16}H_{24}O_2N_5Cl$ α -Phenyl- α -oxy- β -chloroacetylaminooethane and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 432
- $C_{16}H_{24}O_2N_5Br$ *o*-Acetaminophenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 448
- p*-Acetaminophenoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 446
- $C_{16}H_{24}O_2N_5I$ β -Iodopropionyl-*o*-anisidine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 136
- $C_{16}H_{25}ON_6Cl$ *m*-Chloroacetylaminodimethylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 113
- p*-Chloroacetylaminodimethylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 114
- $C_{16}H_{25}O_2N_4Cl$ 3-Methoxy-4-ethoxybenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 680
- $C_{16}H_{32}O_9N_4S$ Kyrine sulfate (LEVENE and VAN DER SCHEER) 1915, 22, 427

C₁₇ Group**C₁₇ II**

- $C_{17}H_{15}N_3$ *o*-Tolueneazo- α -naphthylamine (JACOBS and HEIDELBERGER) 1915, 21, 121
- $C_{17}H_{24}O_{10}$ Cornin (MILLER) 1909-10, 7, xliii
- $C_{17}H_{34}O_3$ Methyl α -hydroxypalmitate (LEVENE and WEST) 1914, 18, 466
- $C_{17}H_{35}N$ Sphingamine (LEVENE and JACOBS) 1912, 11, 553

C₁₇ III

- $C_{17}H_{13}O_2N$ α -Benzoylamino-*p*-methylcinnamic acid anhydride (DAKIN) 1911, 9, 154
- $C_{17}H_{13}O_2N_3$ Isobutylglyoxal semicarbazone (DAKIN and DUDLEY) 1914, 18, 38
- $C_{17}H_{13}O_3N$ Benzoylamino-*p*-methoxycinnamic acid anhydride (DAKIN) 1910-11, 8, 18
- $C_{17}H_{15}O_3N$ α -Benzoylamino-*p*-methylcinnamic acid (DAKIN) 1911, 9, 155
- $C_{17}H_{15}O_4N$ Benzoylamino-*p*-methoxycinnamic acid (DAKIN) 1910-11, 8, 19

- $C_{17}H_{17}O_4N$ Benzoyltyrosine methyl ether (DAKIN) 1910-11, 8, 19
- $C_{17}H_{19}O_3N$ Morphine, picrolonate (WARREN and WEISS) 1907, 3, 336
- $C_{17}H_{20}O_3N_4$ Urine pentose osazone (LEVENE and LA FORGE) 1913, 15, 484
- $C_{17}H_{21}N_4Cl$ β -Naphthobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 664
- $C_{17}H_{23}O_3N$ Atropine, picrolonate (WARREN and WEISS) 1907, 3, 336
- $C_{17}H_{27}O_2N_3$ Methyl *n*-nonyl ketone *p*-nitrophenylhydrazone (DAKIN) 1908, 4, 224
- $C_{17}H_{35}O_2N$ Sphingosine, sulfate, diacetate (LEVENE and JACOBS) 1912, 11, 548
- , picrolonate (LEVENE and WEST) 1916, 24, 64
- $C_{17}H_{37}O_2N$ Dihydrosphingosine, sulfate (LEVENE and JACOBS) 1912, 11, 550
- , picrate, picrolonate (LEVENE and WEST) 1916, 24, 66

C_{17} IV

- $C_{17}H_{14}O_3N_2S$ Benzoylbenzalthiohydantoic acid and sodium salt (JOHNSON and O'BRIEN) 1912, 12, 210
- $C_{17}H_{15}O_5N_2Cl$ Chloroacetylphenylaminoethyl *p*-nitrobenzoate (JACOBS and HEIDELBERGER) 1915, 21, 418
- $C_{17}H_{16}O_2NBr$ Bromoacetyl- ω -*o*-toluidinoacetophenone (JACOBS and HEIDELBERGER) 1915, 21, 107
- $C_{17}H_{16}O_3NCl$ Chloroacetyl- ω -*o*-anisidinoacetophenone (JACOBS and HEIDELBERGER) 1915, 21, 137
- $C_{17}H_{19}ON_2Cl$ *p*-Chloroacetylaminioethylbenzylaniline (JACOBS and HEIDELBERGER) 1915, 21, 117
- $C_{17}H_{21}ON_6Cl$ 6-Chloroacetylaminioquinoline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 143
- $C_{17}H_{23}O_2N_4Br_3$ 2-Acetoxy-3,5-dimethyl-4,6-dibromobenzylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 20, 671
- $C_{17}H_{23}O_5N_6Cl$ Chloroacetylaminioethyl *m*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 411
- Chloroacetylaminioethyl *o*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 410
- Chloroacetylaminioethyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 412

- C₁₇H₂₄O₂N₅Br** 3-Acetamino-4-methylphenacylhexamethylene-tetraminium bromide (JACOBS and HEIDELBERGER)
1915, 21, 461
- C₁₇H₂₄O₃N₅Cl** Ethyl *p*-chloroacetylaminobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 139
- Chloroacetylaminethyl benzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 408
- C₁₇H₂₅O₂N₄Cl** 2-Acetoxy-3,5-dimethylbenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER)
1915, 20, 670
- C₁₇H₂₅O₂N₆I** *p*-Acetaminoiodoacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 20, 687
- C₁₇H₂₆ON₅Cl** Chloroacetyl- ψ -cumidine and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 109
- C₁₇H₂₆O₂N₅Cl** Chloroacetyl amino *o*-tolyl ether and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 417
- β -Phenyl- β -oxy- α -chloroacetylaminopropane and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 436
- C₁₇H₂₆O₃N₅Cl** 1,2-Dimethoxychloroacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 20, 692

C₁₈ Group

- C₁₈H₃₈** Octadecane (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 524

C₁₈ II

- C₁₈H₁₈O₆** Ethylene anisate (JACOBS and HEIDELBERGER)
1915, 21, 471
- C₁₈H₃₄O₄** Ethyl undecylmalonate (LEVENE, WEST, ALLEN, and VAN DER SCHEER)
1915, 23, 73
- C₁₈H₃₆O₃** Ethyl α -hydroxypalmitate (LEVENE and WEST)
1914, 18, 466

C₁₈ III

- C₁₈H₂₀O₄N₆** Isobutylglyoxal dinitrophenylhydrazone (DAKIN and DUDLEY)
1914, 18, 39
- C₁₈H₂₁O₃N** Codeine, picrate (WARREN and WEISS)
1907, 3, 336

- $C_{18}H_{22}ON_4$ *p*-Acetaminobenzeneazodiethylaniline (JACOBS and HEIDELBERGER) 1915, 21, 123
 $C_{18}H_{24}O_4N_4$ Deaminochondrosamine phenylosazone (LEVENE and LA FORGE) 1914, 18, 127

C₁₈ IV

- $C_{18}H_{13}O_2N_2Cl$ Benzeneazo- β -naphthyl chloroacetate (JACOBS and HEIDELBERGER) 1915, 21, 470
 $C_{18}H_{15}O_3N_3S$ 1-Phenyl-2-ethylmercapto-4-*p*-nitrobenzalhydantoin (JOHNSON and BRAUTLECHT) 1912, 12, 183
 $C_{18}H_{17}O_5N_4Br_2$ Glucuronic acid *p*-bromophenylhydrazone (LEVENE and LA FORGE) 1913, 15, 76
 $C_{18}H_{20}O_4N_2S_2$ Thiotyrosine disulfide (JOHNSON and BRAUTLECHT) 1912, 12, 190
 $C_{18}H_{21}ON_4Cl$ *p*-Chloroacetylaminobenzeneazodiethylaniline (JACOBS and HEIDELBERGER) 1915; 21, 124
 $C_{18}H_{21}ON_4Br$ *p*-Acetaminobenzeneazo-2'-bromo-4'-diethylaminobenzene (JACOBS and HEIDELBERGER) 1915, 21, 128
 $C_{18}H_{21}O_2N_3Hg$ 4-*p*-Diethylaminobenzeneazophenylmercuric acetate (JACOBS and HEIDELBERGER) 1915, 20, 516
 $C_{18}H_{22}ON_5Cl$ Chloroacetyl- α -naphthylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 109
 Chloroacetyl- β -naphthylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 109
 $C_{18}H_{22}ON_5Br$ β -(ω -Bromoacetyl)-quinaldine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 464
 $C_{18}H_{23}ON_4Cl$ β -Methoxy- α -naphthobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 674
 $C_{18}H_{23}ON_4Br$ α -Naphthoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 442
 β -Naphthoxyethylhexamethylenetetraminium bromide (JACOBS and HEIDELBERGER) 1915, 21, 442
 $C_{18}H_{25}O_5N_4Cl$ Chloroacetyloxyethyl anisate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 471
 $C_{18}H_{25}O_5N_6Cl$ Chloroacetylaminoisopropyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 425
 γ -Chloroacetylaminopropyl *p*-nitrobenzoate and

${}_{15}\text{O}_5\text{N}_6\text{Cl}$ —*continued*:

- hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 423
p-Nitrobenzoylaminoisopropyl chloroacetate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 427
- ${}_{26}\text{O}_2\text{N}_5\text{I}$ 3-Acetamino-4-tolyl ω -iodoethyl ketone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 462
- ${}_{26}\text{O}_2\text{N}_5\text{Cl}$ *m*-Carbethoxychloroacetylbenzylamine (ethyl *m*-chloroacetylaminomethylbenzoate) (JACOBS and HEIDELBERGER) 1915, 20, 692
 Chloroacetylaminethyl *o*-toluate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 409
 Chloroacetylaminethyl *p*-toluate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1905, 21, 409
- ${}_{26}\text{O}_4\text{N}_5\text{Cl}$ Chloroacetylaminethyl anisate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 415
- ${}_{27}\text{O}_2\text{N}_6\text{Cl}$ 1-Methyl-4-acetaminochloroacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 688
- ${}_{27}\text{O}_{17}\text{NS}$ Chondroitin sulfuric acid (LEVENE and LA FORGE) 1913, 15, 72
- ${}_{29}\text{ON}_6\text{Cl}$ *p*-Chloroacetylaminodiethylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 115
- ${}_{31}\text{O}_2\text{N}_4\text{Br}$ Bornyl bromoacetate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 468
- ${}_{33}\text{O}_2\text{N}_4\text{Br}$ Menthyl bromoacetate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 468

 C_{18} V

- ${}_{15}\text{O}_2\text{N}_3\text{SHg}$ 1-Amino-2-(*p*-naphthaleneazophenylmercuric acetate)-5-sulfonic acid (JACOBS and HEIDELBERGER) 1915, 20, 517

 C_{19} Group C_{19} III

- ${}_{39}\text{O}_2\text{N}$ Dimethylsphingosine (LEVENE and JACOBS) 1912, 11, 552

C₁₉ IV

- C₁₉H₂₃O₃N₄Cl 2-Oxy-3-carbomethoxynaphthobenzylhexamethylenetetraminium chloride (JACOBS and HEIDELBERGER) 1915, 20, 682
- C₁₉H₂₄ON₃Cl Chloroacetylbis-(*p*-dimethylaminophenyl)-methylaniline (chloroacetylleucoauramine) (JACOBS and HEIDELBERGER) 1915, 21, 472
- C₁₉H₂₆O₅N₅Cl Chloroacetylaminooethyl acetylsalicylate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 414
- 1,2-Diacetoxychloroacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 692
- C₁₉H₂₆O₁₅N₈P₂ Guanine-cytosine dinucleotide (JONES and RICHARDS) 1915, 20, 30
- C₁₉H₂₇O₅N₆Cl β-Chloroacetylaminoo-γ-butyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 429
- δ-Chloroacetylaminobutyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 428
- Chloroacetylethylaminooethyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 411
- C₁₉H₂₉O₃N₆Cl 1-Acetamino-4-ethoxychloroacetylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 69
- C₁₉H₃₀O₄N₅Cl γ-Chloroacetylaminopropyl anisate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 41

C₂₀ Group

- C₂₀H₄₂ Eicosane (LEVENE, WEST, and VAN DER SCHEER) 1915, 20, 5

C₂₀ II

- C₂₀H₃₀N₂ Benzylphenylhydrazine derivative of reducing component of yeast nucleic acid (Boos) 1908-09, 5, 4
- C₂₀H₂₂N₄ *p*-Diethylaminobenzeneazo-β-naphthylamine (JACOBS and HEIDELBERGER) 1915, 21, 1
- C₂₀H₃₈O₄ α-Acetoxystearic acid (LEVENE and WEST) 1914, 16, 4
- C₂₀H₄₁I Eicosyl iodide (LEVENE, WEST, and VAN DER SCHEER) 1915, 20, 5

C₂₀ III

- ¹⁶O₄N₆ Phenylglyoxal di-*p*-nitrophenylhydrazone (DAKIN and DUDLEY) 1913, 15, 138
- ¹⁴O₂N₂ Quinine, picrolonate (WARREN and WEISS) 1907, 3, 337
- ¹⁶ON₄ *p*-Acetaminobenzeneazodipropylaniline (JACOBS and HEIDELBERGER) 1915, 21, 124
- ³²N₈Cl₂ *m*-Xylylenedihexamethylenetetraminium dichloride (JACOBS and HEIDELBERGER) 1915, 20, 664
- o*-Xylylenedihexamethylenetetraminium dichloride (JACOBS and HEIDELBERGER) 1915, 20, 663
- ⁵⁵O₄₉P₉ Acid from wheat bran, barium and brucine salts (ANDERSON) 1912, 12, 457

C₂₀ IV

- ¹⁸O₄N₄S₂ Tyrosine disulfide hydantoin (JOHNSON and BRAUTLECHT) 1912, 12, 194
- ¹⁴ON₅Cl Chloroacetyldiphenylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 105
- ¹⁴ON₇Cl *p*-Chloroacetylaminobenzene and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 118
- ¹⁴O₂N₇Cl Benzeneazo-*m*-chloroacetylaminophenol and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 134
- ¹⁵ON₄Cl *p*-Chloroacetylaminobenzeneazodipropylaniline (JACOBS and HEIDELBERGER) 1915, 21, 125
- ¹⁶O₂N₅Cl β -Methoxy- α -chloroacetylnaphthobenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 690
- ³³ON₆Cl *p*-Chloroacetylaminodipropylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 116

C₂₁ Group**C₂₁ II**

- ¹⁸O₈ Triacetyl baptisol (CLARK) 1915, 21, 654
- ²⁷O₂₀ Algin (alginic acid) (HOAGLAND and LIEB) 1915, 23, 290

C₂₁ III

- ¹⁸O₄N₆ Benzylglyoxal di-*p*-nitrophenylhydrazone (DAKIN and DUDLEY) 1914, 18, 43

- $C_{21}H_{21}O_5N$ Hydrastine, picrolonate (WARREN and WEISS) 1907, 3, 337
 $C_{21}H_{22}O_2N_2$ Strychnine, picrolonate (WARREN and WEISS) 1907, 3, 334
 $C_{21}H_{34}N_8Cl_2$ Mesityldihexamethylenetetraminium dichloride (JACOBS and HEIDELBERGER) 1915, 20, 664
 $C_{21}H_{39}O_4N$ Diacetylsphingosine (LEVENE and JACOBS) 1912, 11, 551

C₂₁ IV

- $C_{21}H_{18}ONCl$ Chloroacetyltriphenylmethylaniline (JACOBS and HEIDELBERGER) 1915, 21, 473
 $C_{21}H_{23}O_5N_6Cl$ *o*-Chloroacetylaminophenyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 132
 $C_{21}H_{24}O_3N_5Cl$ *o*-Chloroacetylaminophenyl benzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 131
 $C_{21}H_{25}O_5N_4Cl$ Chloroacetylaminophenyl *p*-(azodiethylaniline)-benzoate (chloroacetylaminophenyl ester of *p*-carboxybenzeneazo-*p'*-diethylaminobenzene) (JACOBS and HEIDELBERGER) 1915, 21, 413
 $C_{21}H_{26}O_3N_5Cl$ β -Acetoxy- α -chloroacetylnaphthobenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 689
 Chloroacetylaminophenyl β -naphthoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 410
 $C_{21}H_{26}O_3N_5I$ β -Acetoxy- α -iodoacetylnaphthobenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 20, 690
 $C_{21}H_{27}ON_6Cl$ β -Chloroacetyl- α,α -phenylbenzylhydrazine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 475
 $C_{21}H_{33}O_3N_6Cl$ Diethylaminophenyl *p*-chloroacetylaminobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 140

C₂₂ Group

- $C_{22}H_{46}$ Docosane (LEVENE, WEST, and VAN DER SCHEER) 1915, 20, 528

C₂₂ III

- $C_{22}H_{45}N_4I$ Cetylhexamethylenetetraminium iodide (JACOBS and HEIDELBERGER) 1915, 21, 466

C₂₂ IV

- H₁₆ON₃Cl** β -Naphthaleneazochloroacetyl- β -naphthylamine
(JACOBS and HEIDELBERGER) 1915, 21, 119
- H₂₃ON₄Cl** *p*-Diethylaminobenzeneazochloroacetyl- α -naphthylamine (JACOBS and HEIDELBERGER)
1915, 21, 130
- H₂₆O₂N₅Cl** Chloroacetyl- ω -anilinoacetophenone and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 107
- H₂₆O₃N₅Cl** *o*-Chloroacetylaminobenzyl benzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 139
- H₂₆O₆NCl** Dibenzalxylohexosaminic acid ester hydrochloride
(LEVENE and LA FORGE) 1915, 21, 356
- H₂₇O₂N₆Cl** Chloroacetylphenylglycineanilide and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 106
- H₂₈ON₇Cl** Chloroacetylaminoozotoluene and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 118
- H₂₈O₂N₅Cl** α, β -Diphenylchloroacetylaminooethanol and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 434
- α, β -Isodiphenylchloroacetylaminooethanol and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 435
- H₂₉ON₈Cl** *p*-Chloroacetylaminobenzeneazodimethylaniline and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 123
- H₃₅O₅N₆Cl** *m*-Chloroacetylaminomethylbenzoic acid diethylaminoethyl ester and hexamethylenetetramine (JACOBS and HEIDELBERGER)
1915, 20, 694
- H₄₆O₂NCl** Palmityl- α -methylcholine chloride (palmityl- β -methylethoxytrimethylammonium chloride) (MENGE)
1912-13, 13, 108

C₂₃ Group**C₂₃ III**

- I₂₁O₃N** α -Phenyl- α -benzoyloxy- β -benzoylaminopropane
(JACOBS and HEIDELBERGER) 1915, 21, 436
- I₂₄ON₄** *p*-Acetaminobenzeneazoethylbenzylaniline (JACOBS and HEIDELBERGER)
1915, 21, 126
- I₂₆O₄N₂** Brucine, picrolonate (WARREN and WEISS)
1907, 3, 335
- I₄₁O₅N** Triacetylsphingosine (LEVENE and JACOBS)
1912, 11, 551

C₂₃ IV

- C₂₃H₂₃ON₄Cl** *p*-Chloroacetylaminobenzeneazoethylbenzylaniline (JACOBS and HEIDELBERGER) 1915, 21, 126
- C₂₃H₂₇O₅N₆Cl** Chloroacetylphenylaminoethyl *p*-nitrobenzoate and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 419
- C₂₃H₂₈O₂N₅Br** Bromoacetyl- ω -*o*-toluidinoacetophenone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 107
- C₂₃H₂₈O₃N₅Cl** Chloroacetyl- ω -*o*-anisidinoacetophenone and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 137
- C₂₃H₃₁ON₆Cl** *p*-Chloroacetylaminophenylbenzylamine and hexamethylenetetramine (JACOBS and HEIDELBERGER) 1915, 21, 117

C₂₄ Group

- C₂₄H₅₀** Isotetracosane from lignoceric acid (LEVENE and WEST) 1913, 14, 265; 1914, 18, 480
- n*-Tetracosane (LEVENE and WEST) 1914, 18, 478

C₂₄ II

- C₂₄H₂₁N₅** *o*-Tolueneazo-*o*-tolueneazo- β -naphthylamine (JACOBS and HEIDELBERGER) 1915, 21, 120
- C₂₄H₄₈O₂** Carnaubic acid (DUNHAM) 1908, 4, 297
- Lignoceric acid (LEVENE and JACOBS) 1912, 12, 385
- (LEVENE and WEST) 1913, 14, 263
- (LEVENE) 1913, 15, 363
- Tetracosanic acid (LEVENE, WEST, ALLEN, and VAN DER SCHEER) 1915, 23, 75
- C₂₄H₄₉I** Isotetracosyl iodide (LEVENE and WEST) 1914, 18, 480
- C₂₄H₅₀O** Isotetracosyl alcohol (LEVENE and WEST) 1914, 18, 479

C₂₄ III

- C₂₄H₂₆O₄N₆** Glucuronic acid osazone hydrazide (LEVENE and LA FORGE) 1913, 15, 75; 1914, 18, 240

C₂₄ IV

- C₂₄H₁₈ON₅Cl** Benzeneazobenzeneazochloroacetyl- β -naphthylamine (JACOBS and HEIDELBERGER) 1915, 21, 119

C₁₄H₃₃ON₈Cl *p*-Chloroacetylaminobenzeneazodiethylaniline
and hexamethylenetetramine (JACOBS and HEIDEL-
BERGER) 1915, 21, 124

C₂₅ Group

C₂₅H₅₂ Pentacosane from cerebronic acid (LEVENE and JACOBS)
1912, 12, 386
(LEVENE and WEST) 1913, 14, 264

C₂₅ II

C₂₅H₄₈O₄ Docosylmalonic acid (LEVENE, WEST, ALLEN, and
VAN DER SCHEER) 1915, 23, 74

C₂₅H₅₀O₃ Cerebronic acid (LEVENE and JACOBS)
1912, 12, 382
(LEVENE and WEST) 1913, 14, 258

C₂₅ IV

C₂₅H₂₈ON₃Cl *p*-Chloroacetylaminoleucomalachite green (JA-
COBS and HEIDELBERGER) 1915, 21, 141

C₂₅H₃₆ON₇Cl Chloroacetylleucoauramine and hexamethylene-
tetramine (JACOBS and HEIDELBERGER)
1915, 21, 473

C₂₅H₅₅O₅₄P₉Ba₅ Barium salt of wheat bran acid (ANDERSON)
1912, 12, 455

C₂₆ Group

C₂₆H₅₄ Isohexacosane (cerane) (LEVENE, WEST, and VAN DER
SCHEER) 1915, 20, 533

Hexacosane (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 529

C₂₆ II

C₂₆H₅₂O₂ Ethyl carnaubate (DUNHAM) 1908, 4, 299
Ethyl lignocerate (LEVENE) 1913, 15, 362
(LEVENE and WEST) 1913, 15, 193

Ethyl tetracosanate (LEVENE, WEST, ALLEN, and
VAN DER SCHEER) 1915, 23, 75

C₂₆H₅₂O₃ Methyl cerebrionate (LEVENE and WEST)
1913, 14, 261

C₂₆ IV

C₂₆H₂₂ON₅Cl *o*-Tolueneazo-*o*-tolueneazochloroacetyl- β -naph-
thylamine (JACOBS and HEIDELBERGER)
1915, 21, 120

- $C_{28}H_{37}ON_8Cl$ *p*-Chloroacetylaminobenzeneazodipropylaniline
and hexamethylenetetramine (JACOBS and HEIDEL-
BERGER) 1915, 21, 125

C₂₇ Group**C₂₇ II**

- $C_{27}H_{21}N_5$ *o*-Tolueneazo- α -naphthaleneazo- β -naphthylamine
(JACOBS and HEIDELBERGER) 1915, 21, 121
- $C_{27}H_{52}O_4$ Acetylcerebronic acid (LEVENE and WEST)
1913, 14, 262
- $C_{27}H_{54}O_3$ Ethyl cerebrionate (LEVENE and WEST)
1913, 14, 260

C₂₇ IV

- $C_{27}H_{30}ON_5Cl$ Chloroacetyltriphenylmethylamine and hexameth-
ylenetetramine (JACOBS and HEIDELBERGER)
1915, 21, 474
- $C_{27}H_{37}O_2N_8Cl$ Chloroacetylaminoethyl *p*-(azodiethylaniline)-
benzoate and hexamethylenetetramine (JACOBS and
HEIDELBERGER) 1915, 21, 413

C₂₈ Group

- $C_{28}H_{58}$ Octacosane (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 529

C₂₉ Group**C₂₉ II**

- $C_{29}H_{56}O_4$ Acetate of ethyl cerebrionate (LEVENE and WEST)
1913, 14, 261
- Ethyl docosylmalonate (LEVENE, WEST, ALLEN, and
VAN DER SCHEER) 1915, 23, 74

C₂₉ IV

- $C_{29}H_{35}ON_8Cl$ *p*-Chloroacetylaminobenzeneazoethylbenzylani-
line and hexamethylenetetramine (JACOBS and HEI-
DELBERGER) 1915, 21, 127

C₃₀ Group

- $C_{30}H_{62}$ Isotriacontane (melissane) (LEVENE, WEST, and VAN
DER SCHEER) 1915, 20, 534
- Triacontane (LEVENE, WEST, and VAN DER SCHEER)
1915, 20, 530

C₃₀ II

¹⁴ O ₆	Isomannid dilaurate (BLOOR)	1912, 11, 423
¹⁶ O ₇	Mannite dilaurate (BLOOR)	1912, 11, 421

C₃₁ Group**C₃₁ IV**

¹⁰ ON ₇ Cl	<i>p</i> -Chloroacetylaminoleucomalachite green and hexamethylenetetramine (JACOBS and HEIDELBERGER)	1915, 21, 141
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C₃₂ Group

¹⁶	Dotriacontane (LEVENE, WEST, and VAN DER SCHEER)	1915, 20, 530
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C₃₂ IV

⁸ O ₆ N ₂ S ₂	Thiotyrosine disulfide dibenzoate (JOHNSON and BRAUTLECHT)	1912, 12, 193
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C₃₄ Group

⁷⁰	Tetratriacontane (LEVENE, WEST, and VAN DER SCHEER)	1915, 20, 531
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C₃₅ Group**C₃₅ IV**

¹⁸ ON ₇ Cl	<i>o</i> -Chloroacetyl-amino- <i>p'</i> , <i>p''</i> -tetraethyldiaminotriphenylmethane and hexamethylenetetramine (JACOBS and HEIDELBERGER)	1915, 21, 142
	<i>p</i> -Chloroacetyl-amino- <i>p'</i> , <i>p''</i> -tetraethyldiaminotriphenylmethane and hexamethylenetetramine (JACOBS and HEIDELBERGER)	1915, 21, 142

C₃₆ Group

⁴	Hexatriacontane (LEVENE, WEST, and VAN DER SCHEER)	1915, 20, 531
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C₃₆ II

⁴ O ₈	Tribenzoylbaptisol (CLARK)	1915, 21, 655
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C₄₂ Group**C₄₂ II**

C₄₂H₇₈O₆	Isomannid distearate (BLOOR)	1912, 11, 145
	Mannid distearate (BLOOR)	1909-10, 7, 427; 1912, 11, 143
C₄₂H₈₀O₇	Mannitan distearate (BLOOR)	1912, 11, 144

SUGGESTIONS FOR THE PREPARATION OF MANUSCRIPTS.

COPY.

All manuscripts should be copied with triple spacing and $1\frac{1}{2}$ inch margins.

The original typewritten copy should be submitted for publication, not a carbon copy. It should be sent flat, not rolled or folded. All corrections on the manuscript should be clearly written in ink. Manuscripts should be consistent in style; a word should not be abbreviated in one line and written out a few lines below.

TITLE.

The title should be written on a separate sheet. The author's name, the laboratory where the work was done, and the words, received for publication, should be written on a separate sheet. An abbreviated form of the title, not exceeding thirty-six characters in length, and the author's name and initials, to be used as running headlines, should be given, also on a separate sheet.

HEADINGS.

Major headings, such as INTRODUCTION, EXPERIMENTAL, DISCUSSION, SUMMARY, CONCLUSION, BIBLIOGRAPHY, EXPLANATION OF FIGURES, also TABLE in table headings, are printed in small capitals, and therefore should be underlined twice.

Minor headings, whether center or side, and descriptive material in table headings, are printed in italics, and therefore underlined once in the manuscript. Capitalize the nouns, adjectives, pronouns, verbs, *Cc.*, *Gm.*, *per Cent*, etc.

Dates are not underlined, except when they occur in an italicized heading.

The form September 15, 1915, is preferred to IX-15-15.

TEXT.

Begin every experiment, table, or quotation of over five lines on a new sheet. When the text is resumed start with another fresh sheet. This method brings the material of the entire manuscript in sequence, but permits, without mutilation of the manuscript, the separation in the Printer's office of tables, and all other small type, which are set up separately.

Number the sheets consecutively throughout. Mark in ink the place for each illustration.

TABLES.

The form for table headings has already been given under "HEADINGS." Table column headings are written in small letters and followed by periods (see Table I).

Words like *gm.*, *cc.*, *per cent*, *°C.*, etc., referring to an entire column in a table, are written in small letters at the top of the column, and underlined once.

In tables use ditto marks for words when possible, but not for figures.

TABLE I.

Changes in the Blood of Rabbit 1 after Hemorrhage.

Date.	Amount of blood re- moved.	Hemo- globin.	Red blood corpuscles.	Remarks.
<i>1915</i>	<i>cc.</i>	<i>per cent</i>		
Sept. 13	10	89	5,160,000	Weight 1,605 gm.
" 14	10	68	2,870,000	No nucleated red cells.
" 15	10	75	3,990,000	" " " "
" 16	10	58	3,070,000	" " " "

FOOT-NOTES.

Foot-Notes to Text.—Typewrite all foot-notes together at the end of the paper and number them consecutively from 1 up, to correspond with the reference numbers in the text.

ll foot-note references consecutively throughout the if the foot-note references on the first page are on the second page should be 4, 5, 6, etc. Superior ated as ¹, ², ³) should be used in the text to indicate

acing should be used in typewriting foot-notes.

to Tables.—Foot-notes to tables are starred (*, **, t numbered, in order to distinguish them from foot-

REFERENCES.

are usually printed in the form of foot-notes, and umbered and located with the other foot-notes. If le is referred to more than once, the foot-note is with the first reference. The number of the foot- ted at subsequent points in the text where the same rred to. Do not use *loc. cit.*

or prefers, the references may be printed in a bibli- e end of the paper. In this case one of two systems opted: (a) The references in the bibliography are umbered in the order of their appearance in the pendently of the foot-notes. (b) They are arranged r according to the names of the authors. In this reference is the name of the author followed by the ublication referred to. If more than one article by hor in a given year is referred to, the letters *a*, *b*, *c*, sed to differentiate them. This system is convenient ng other reasons, of the ease with which new refer- inserted in the manuscript, and of the readiness given reference can be located in the printed bibli-

nces to a bibliography are indicated by numbers s instead of the superior numbers used for foot- “Ehrlich¹” indicates a foot-note; but “Ehrlich (1)” 1910, *a*)” or “(Ehrlich, 1910, *a*)” indicates a refer- ibliography. Two separate series of numbers can in the same text to indicate respectively foot-notes s in the bibliography.

or references is indicated by the following example,

the order of data being: author, initials, journal (underlined), year, volume (small Roman numerals), and page:

* Fischer, E., *Ber. chem. Ges.*, 1889, xxii, 87.

The abbreviations used by the *Journal* for the most commonly cited publications are listed below.

<i>Am. Chem. J.</i>	<i>Ergebn. allg. Path. u. path. Anat.</i>
<i>Am. J. Physiol.</i>	<i>Gazz. chim. ital.</i>
<i>Ann. Chem.</i>	<i>J. Agric. Research.</i>
<i>Ann. chim. phys.</i>	<i>J. Am. Chem. Soc.</i>
<i>Arch. exp. Path. u. Pharm.</i>	<i>J. Am. Med. Assn.</i>
<i>Arch. ges. Physiol.</i>	<i>J. Biol. Chem.</i>
<i>Arch. Int. Med.</i>	<i>J. Chem. Soc.</i>
[Arkansas] <i>Agric. Exp. Station, Bull.</i>	<i>J. Exp. Med.</i>
[5, 1915].	<i>J. Ind. and Eng. Chem.</i>
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EXPLANATION OF FIGURES.

Typewrite explanations of the figures, whether for plates, text-figures, and number them to correspond with the figure which they refer. The Bibliography precedes the Explanation of Figures.

FORMS AND ABBREVIATIONS.

Gram = gm.	a.m., p.m. (lower case).
Cubic centimeter = cc.	In both large and small type
Centimeter = cm.	write 30 cc., 20 mg., 20 gm.
Millimeter = mm.	Always write 0.25; <i>i.e.</i> , with
Milligram = mg.	a zero before the decimal
Kilogram = kilo or kg.	point.
per cent (without a period).	

Use the form 193–194.5°, placing the degree mark at the end only.

Use $[\alpha]_D^{20}$ for specific rotation (for 20° and sodium light). The values for $[\alpha]$ are best expressed in the following way:

$$[\alpha]_D^{25} = \frac{-0.25^\circ}{1} \times \frac{2.1662}{0.1505} = -3.58^\circ$$

For normal and molecular solutions the expressions 2.5 N and 0.5 M are preferred to $2\frac{1}{2}$ N and $\frac{M}{2}$. In exceptional cases, however, as $3/16$ M, the fractional form is more convenient.

Hydrated salts should be written as $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$.

Small numbers in the text are usually written out, large numbers expressed in numerals; thus seven, but 250.

In numbers of four figures or over use commas; as 1,000, 10,000.

SPELLING.

Words like hemorrhage, anesthetic, etc., are spelled with *e* (not *ae*).

Use *f* instead of *ph* for sulfur and sulfur derivatives.

Words serving as special names of definite objects, such as Experiment 8, Table I, Rabbit 1, are written with capital letters.

NOMENCLATURE.

The usage of the American Chemical Society is followed. The following rules cover most of the terms used in this *Journal*.

Hydroxyl derivatives of hydrocarbons are to be given names ending in *-ol*; as glycerol, cholesterol, pinacol (not pinacone). This applies also to alcohols of the sugar series; as mannitol, heptitol, etc.

Compounds which are not alcohols but have received names ending in *-ol* should be spelled *-ole*; as *anisole*, *indole*. (German hydrocarbon names, as *Benzol*, *Toluol*, etc., are to be written *benzene*, *toluene*, etc.)

Hydroxy- and not oxy- should be used in designating a hydroxyl compound; as *hydroxyacetic acid*, $\text{CH}_2(\text{OH})\text{CO}_2\text{H}$, (not *oxyacetic acid*).

As regards the endings *-in* and *-ine*, the latter should always be used for *basic* substances, and for them only; *-in* is used for glycerides, glucosides, bitter principles, proteins, etc.; thus *aniline*, *tyrosine*, *purine*, *morphine*; but *gelatin*, *palmitin*, *amygdalin*, *albumin*, *protein* (not *proteid*).

When a substituent is one of the groups NH_2 , NHR , NR_2 , NH , or NR , its name should end in *-ino*; thus $\text{NH}_2\text{CH}_2\text{CH}_2\text{CO}_2\text{H}$, β -*aminopropionic acid* (not *amidopropionic acid*); $\text{C}_6\text{H}_5\text{NHCH}_2\text{CH}_2\text{CO}_2\text{H}$, β -*anilinopropionic acid*; $\text{CH}_3\text{CH}_2\text{NH}_2\text{CO}_2\text{H}$, α -*aminopropionic acid*.

The term *ether* must not be used for compounds which are properly called esters. Esters and metallic salts should be designated in the form, *diethyl phthalate*, *methyl hydrogen succinate*, *sodium propionate*, etc. (not as the diethyl ester of phthalic acid, the monomethyl ester of succinic acid, or the sodium salt of propionic acid).

Acid radicals, such as $\text{C}_6\text{H}_5\text{CO}$, must have names ending in *-yl*, and their compounds with halogens, as $\text{C}_6\text{H}_5\text{COCl}$, are to be termed *chlorides*, *bromides*, etc. Thus, *benzoyl chloride* (not *chloride of benzoic acid* or *benzoic acid chloride*).

The connective *o* is to be used in such combining forms as *amino-*, *bromo-*, *chloro-*, *cyano-*, and *iodo-*; thus *bromobenzene*, *chloroacetic*, *nitroaniline*. A few exceptions to this rule are permitted on account of long established usage; as *acetamide*, *cyanamide*.

Substances containing the group SO_3H should, if possible, be called *sulfonic acids*; failing this, *sulfo compounds*; thus *phenylsulfonic acid*, $\text{C}_6\text{H}_5\text{SO}_3\text{H}$, and *sulfobenzoic acid*, $\text{HO}_2\text{CC}_6\text{H}_4\text{SO}_3\text{H}$.

Salts of organic bases with hydrochloric acid should be called *hydrochlorides* (not *hydrochlorates* or *chlorhydrates*).

Salts of chloroplatinic acid are called *chloroplatinates* (not *platinichlorides*), and the formulas should be written in the form

$(\text{CH}_3\text{NH}_2)_2\text{H}_2\text{PtCl}_6$. Salts of thiocyanic acid, HCNS , should be called thiocyanates. Use sodium thiosulfate for $\text{Na}_2\text{S}_2\text{O}_3$.

The word hydroxide should be used for a compound with OH , and hydrate for a compound with H_2O ; thus, chlorine hydrate, $\text{Cl}_2 \cdot 10\text{H}_2\text{O}$; barium hydroxide, $\text{Ba}(\text{OH})_2$.

Greek letters should be indicated by Gk. on the margin of the manuscript.

The following letters are italicized and should be underlined: *o-*, *m-*, *p-*, *d-*, and *l-*, for ortho, meta, para, dextro, and levo.

Use *dl-* (not *r-*) for racemic.

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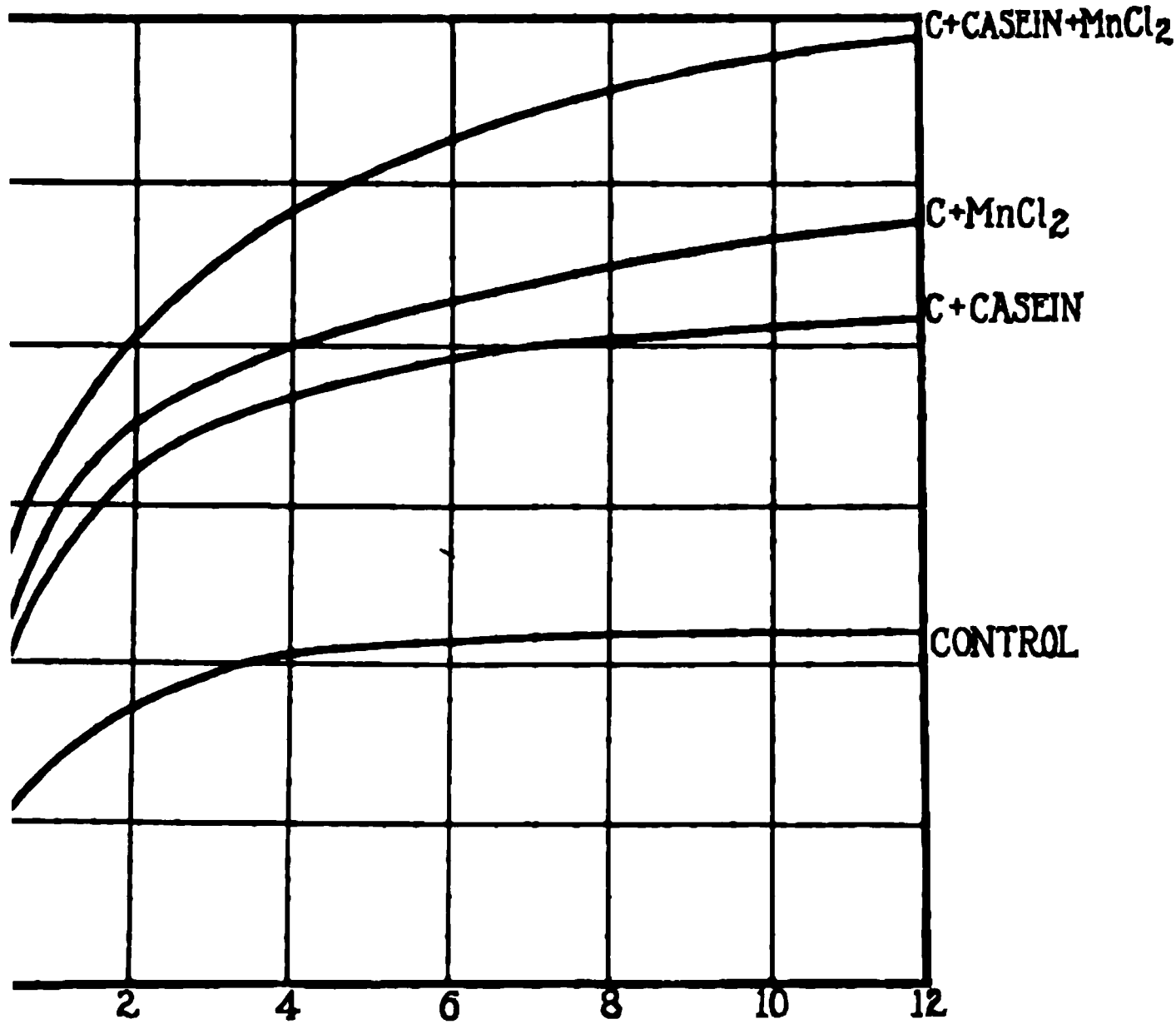
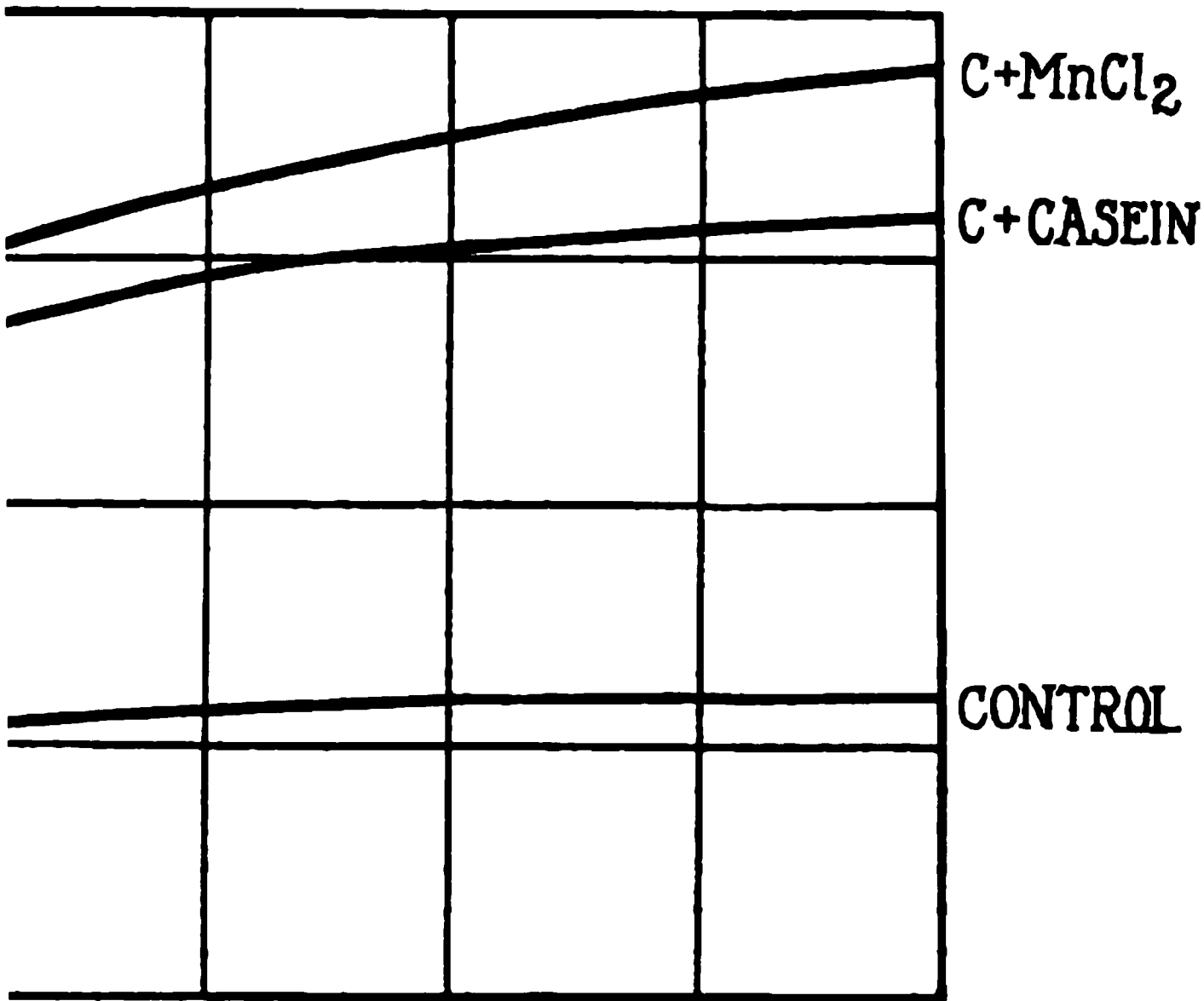
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Chondrosamine:

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1919, 37, 41

Diet—continued:

Body conditions, interrela-
tion between (ANDERSON
and LUSK)

1917, 32, 421

Calcium assimilation and
(HART, STEENBOCK, and
HOPPERT)

1921, 48, 33

— content of serum, effect
on (KRAMER and HOW-
LAND)

1922, 50, xxi

— excretion, effect on
(GIVENS)

1918, 33, viii

Carbon dioxide content of
urine, effect on (DENIS
and MINOT)

1918, 34, 569

Carotinoid-free (PALMER
and KEMPSTER)

1919, 39, 300

Cereal, utilization of car-
bohydrates of (ZENT-
MIRE and FOWLER)

1917, 32, 77

Chloride excretion, effect
on (AUSTIN and JONAS)

1918, 33, 92

Creatine excretion, effect
on (DENIS and MINOT)

1917, 31, 561

— in urine, effect on
(ROSE, DIMMITT, and
BARTLETT)

1918, 34, 601

Energy production, in-
terrelation between (AN-
DERSON and LUSK)

1917, 32, 421

Epinephrine glycosuria,
effect on (McDANELL
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1917, 29, 245

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- Glycogen content of liver, effect on (McDANELL and UNDERHILL)
1917, 29, 255
- storage, effect on (McDANELL and UNDERHILL)
1917, 29, 248
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1916, 27, 1
- High protein, acid-forming diets, ammonia excretion, effect on (LYMAN and RAYMUND)
1919, 39, 339
- Indican excretion, effect on (UNDERHILL and SIMPSON)
1920, 44, 69
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1921, 47, 455
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1917, 32, 348
- Lysine in (HOGAN)
1918, 33, 154
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1918, 33, viii
- Milk composition, effect on (HESS, UNGER, and SUPPLEE)
1920–1921, 45, 229
- secretion, effect on (HART, NELSON, and PITZ)
1918, 36, 291
- vitamines, effect on (HART, STEENBOCK, and ELLIS)
1920, 42, 383
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1922, 50, 339
- —, relation to (HESS, UNGER, and SUPPLEE)
1920–1921, 45, 229

Diet—continued:

- Milk yield, effect on (CARY)
1922, 50, xxxv
- Peas, flour and cottonseed meal, deficiencies of (McCOLLUM, SIMMONDS, and PARSONS)
1918, 33, 411
- Pellagra-producing, biological analysis of (McCOLLUM and SIMMONDS)
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- Pellagrous, foods as correctives for (McCOLLUM, SIMMONDS, and PARSONS)
1919, 38, 126
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1920, 44, 69
- Phosphorus content of serum, effect on (KRAMER and HOWLAND)
1922, 50, xxi
- Plasma chlorides, effect on (AUSTIN and JONAS)
1918, 33, 91
- — and chloride excretion, effect on (AUSTIN and JONAS)
1918, 33, 92
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1919, 38, 118
- , uric acid, endogenous, elimination, effect on (LEWIS and DOISY)
1918, 36, 1
- Refractive index of serum, effect on (HATAI)
1918, 35, 546

Diet—continued:

Rickets, relation to (McCOLLUM)

1920–1921, 45, 333

Scurvy, experimental, of guinea pigs and (COHEN and MENDEL)

1918, 35, 425

(HESS and UNGER)

1918, 35, 479

Sugar excretion, effect on (BENEDICT and OSTERBERG)

1918, 34, 210

— — in man, effect on (BENEDICT, OSTERBERG, and NEUWIRTH)

1918, 34, 221

Tadpole, growth of, effect on (EMMETT and ALLEN)

1919, 38, 327

Uric acid excretion, effect on (HÖST)

1919, 38, 18

Urinary constituents, excretion of, effect on (UNDERHILL and BOGERT)

1916, 27, 161

Urine of calves, composition of, effect on (BLATHERWICK)

1920, 42, 522

Urochrome excretion, effect on (PELKAN)

1920, 41, lviii

Vitamines in (OSBORNE and MENDEL)

1917, 31, 149

—, fat-soluble, free, preparation of (OSBORNE and MENDEL)

1920–1921, 45, 277

Diethyl 2-butylhexylmalonate:
Preparation (LEVENE and CRETCHER)

1918, 33, 510

Diethyl dibutylmalonate:

Preparation (LEVENE and CRETCHER)

1918, 33, 507

Diethyl malonate:

Hydrolysis by liver lipase (CHRISTMAN and LEWIS)

1921, 47, 501

Diethyl succinate:

Hydrolysis by liver lipase (CHRISTMAN and LEWIS)

1921, 47, 498

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Conductivity of living tissue, effect on (OSTERHOUT)

1918, 36, 489

Electrolytic, through living cells (LOEB)

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Digestion:

Alveolar carbon dioxide, effect on (VAN SLYKE, STILLMAN, and CULLEN)

1917, 30, 404

Egg protein (BATEMAN)

1916, 26, 263

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1917, 29, 367

Gastric, of milk proteins, influence of rennin coagulation (LEARY and SHEIB)

1916–1917, 28, 393

— lipase, rôle of (HULL and KEETON)

1917, 32, 138

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1921, 46, 475

Plasma bicarbonates, effect on (VAN SLYKE, STILLMAN, and CULLEN)

1917, 30, 404

Digestive tract:

Lichenase, occurrence of
(JEWELL and LEWIS)
1918, 33, 161

Dihydroxyphenylalanine:

Velvet bean, isolation from
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1920, 44, 481

Dimethylamine:

Ammonia and, determina-
tion of (WEBER and
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1918, 35, 385

Determination of (WEBER
and WILSON)

1918, 35, 406

p-Dimethylaminobenzaldehyde:

Preparation (INGVALDSEN
and BAUMANN)

1920, 41, 145

4, 6-Dinitroguaiacol:

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1921, 46, xxi

**3, 5-Dinitro-4-hydroxyphenyl-
arsinic acid mercuric acetate:**

Preparation, properties, etc.
(RAIZISS, KOLMER, and
GAVRON)

1919, 40, 537

3, 5-Dinitrosalicylic acid:

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1921, 47, 7

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**2, 6-Dioxy-5-methylpyrimidine-
4-aldehyde:**

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CRETCHER)

1916, 26, 112

Anil (JOHNSON and CRET-
CHER)

1916, 26, 113

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1916, 26, 112

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1916, 26, 112

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Hydrolytic action on esters
(FALK)

1917, 31, 104

p-Diphenols:

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1922, 50, xlviii

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Blood sugar, effect on
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1918, 34, 308

Epinephrin content of
adrenals, effect on (KURI-
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1918, 34, 308

Dipotassium phosphate:

Scurvy, effect on (PITZ)

1918, 36, 446

Dirt:

Roughage for chickens
(HART, HALPIN, and
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1920, 43, 430

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Blood cholesterolin (DENIS)

1917, 29, 93

— sugar, total circulating
(FITZ and BOCK)

1921, 48, 319

Disodium hydrogen phosphate:

Carbon dioxide, heat of
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1922, 50, 471

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Citric acid and, as buffer
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1921, 49, 183

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1920-1921, 45, 17

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1920-1921, 45, 1

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on (WITZEMANN)

1920-1921, 45, 16

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1918, 36, 523

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1922, 50, xlviii

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KAN and WHIPPLE)
1922, 50, 520

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1917, 29, 73

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1916, 26, 457;
1917, 31, 445;
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1916-1917, 28, 447

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1917, 30, 159

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1920, 44, 337

Pancreas, pentose mono-
nucleotide of (BERKELEY)
1920-1921, 45, 263

Muscle, urea content
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1920, 41, lx

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(KARR)
1920, 44, 255, 277

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Diseases of, blood content
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1917, 29, 109

Dulcitol:

Lactic acid bacteria, fer-
mentation by (FRED,
PETERSON, and ANDER-
SON)
1921, 48, 399

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Hydrogen ion concentra-
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1920, 41, 187

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Fat-soluble, distribution in
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1916, 27, 414

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1916, 27, 403

Dystrophy:

Muscular, creatine forma-
tion in (GIBSON and
MARTIN)
1921, 49, 319

E**Eck fistula:**

Phenol conjugation after operation (PELKAN and WHIPPLE)

1922, 50, 514

— excretion, effect on (DUBIN)

1916, 26, 75

Edestin:

Copper compounds (OSBORNE and LEAVENWORTH)

1916-1917, 28, 111

Corn gluten, supplement to (OSBORNE and MENDEL)

1917, 29, 72

Creatine formation, effect on (GIBSON and MARTIN)

1921, 49, 325

Digestion of (FRANKEL)

1916, 26, 40

Growth, value for (OSBORNE and MENDEL)

1916, 26, 1

(OSBORNE, MENDEL, and FERRY)

1917, 37, 229

Histidine content (HANKE and KOESSLER)

1920, 43, 531

Maintenance, value for (OSBORNE and MENDEL)

1916, 26, 1

Metabolism of fasting dog, effect on (RINGER and UNDERHILL)

1921, 48, 517

Pea proteins, supplement to (SURE)

1921, 46, 450

Pepsin, determination of proteolytic activity of (BREWSTER)

1921, 46, 119

Edestin—continued:

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1921, 46, 121

Tryptic digestion, inhibition of, by tin (GOSS)

1917, 30, 58

Vitamine, water-soluble, free (OSBORNE, WAKEMAN, and FERRY)

1919, 39, 36

Egg (s):

Albumin, alkali, action of, to form ester-hydrolyzing substances (HULTON-FRANKEL)

1917, 32, 397

—, bacteria, decomposition by (ROBINSON and TARTAR)

1917, 30, 135

—, blood sugar content, effect on (KURIYAMA)

1917, 29, 133

—, epinephrine glycosuria, effect on (KURIYAMA)

1917, 29, 136

—, — hyperglycemia, effect on (KURIYAMA)

1917, 29, 136

—, metabolism of fasting dog, effect on (RINGER and UNDERHILL)

1921, 48, 511

—, peptic digestion, inhibition of, by tin (GOSS)

1917, 30, 56

—, tin, adsorption of, by (GOSS)

1917, 30, 55

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1917, 30, 57

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Chinese preserved, composition of (BLUNT and WANG)

1916-1917, 28, 125

Composition, calcium, effect of (BUCKNER and MARTIN)

1920, 41, 195

Dextrose content (HEPBURN and ST. JOHN)

1921, 46, xlviii

Echinoderm, cytolysis in (MOORE)

1917, 30, 5

Gaseous exchange during storage (LANGWORTHY and BAROTT)

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1921, 48, 433

Marine, fertilization and hydrogen ion concentration (CLOWES and SMITH)

1922, 50, xlix

Oil, lecithin cadmium chloride from (LEVENE and WEST)

1918, 34, 180

Production, blood fat in relation to (WARNER and EDMONDS)

1917, 31, 281

(RIDDLE and HARRIS)

1918, 34, 161

—, cereal grains, effect of (HART, HALPIN, and MCCOLLUM)

1917, 29, 61

Proteins, digestion of (BATEMAN)

1916, 26, 263

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Proteins, utilization of (BATEMAN)

1916, 26, 263

Sea urchin, cytolysis in (MOORE)

1916-1917, 28, 475

Shell, composition, calcium, effect of (BUCKNER and MARTIN)

1920, 41, 195

—, formation, rôle of calcium (BUCKNER)

1922, 50, xli

White, coefficient of digestibility (ROSE and MACLEOD)

1922, 50, 84

—, corn, nutritive value, effect on (HOGAN)

1916, 27, 202

—, digestion of raw (ROSE and MACLEOD)

1922, 50, 83

—, heated, nutritive value of (HOGAN)

1917, 30, 115

—, uric acid, endogenous, metabolism, effect on (LEWIS, DUNN, and DOISY)

1918, 36, 14

Yolk, antineuritic substances of (STEENBOCK)

1921, 29, xxvii

—, carotin, effect of, on color (PALMER and KEMPSTER)

1919, 39, 331

—, cephalin of (LEVENE and WEST)

1918, 35, 285

—, cerebrosides (LEVENE and WEST)

1917, 31, 649

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Yolk, color on carotinoid-free rations (PALMER and KEMPSTER)

1919, 39, 302, 307

—, feeds, effect of, on color (PALMER and KEMPSTER)

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—, pigments of (PALMER and KEMPSTER)

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—, utilization of (BATEMAN)

1916, 26, 286

—, vitamine, fat-soluble, source of (PALMER and KENNEDY)

1921, 46, 574

—, xanthophyll, effect of, on color (PALMER and KEMPSTER)

1919, 39, 331

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1919, 38, 198

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Amniotic fluid (UYENO)

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1920, 42, 216

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1920, 42, 216

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1918, 36, 557

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1920, 42, 216

Solutions, determination of (McCLENDON)

1920, 43, 317

Tone-minimum, increasing sharpness of (McCLENDON)

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Electrodes:

Calomel, preparation of (McCLENDON)

1916-1917, 28, 136

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Luminescence during (HARVEY)

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1917, 29, ix

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1918, 35, 497

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1921, 47, 547

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1918, 35, 137

Elements:

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1918, 34, 131

Elodea:

Anesthetics, effect of (MEDES and McCLENDON)

1920, 42, 541

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Respiration, anesthetics,
effect of (MEDES and
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1920, 42, 544

mbryos:

Plant, isolated, growth of
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1917, 29, 209

Wheat, meal, vitamine,
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1917, 29, 29

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1917, 32, 421

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1917, 30, 197

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Diastatic, of blood (LEWIS
and MASON)
1920, 44, 455

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of *Macrocystis pyrifera*
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1920, 41, lvi

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1920–1921, 45, 397

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1922, 50, 323

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rocystis pyrifera* (BERK-
ELEY)
1920, 41, lvi

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1918, 36, 575

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1918, 33, 453

Proteoclastic tissues, of
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1917, 31, 303

Proteolytic, brain, presence
in (GIBSON, UMBREIT,
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1921, 47, 333

—, proteins, behavior to-
wards (FRANKEL)
1916, 26, 31

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1922, 50, xlii

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1918, 36, 229

Sarraceniaceae, North
American (HEPBURN,
ST. JOHN, JONES, and
BAKER)
1922, 50, xlvi

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1917, 29, xxi

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1921, 46, xlviii

Utilization of sugars, role
in (HOAGLAND and
MANSFIELD)

1917, 31, 507

Eosin hemolysis:

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1920, 41, lxiv

Epichitosamine:

Osazone (LEVENE)

1919, 39, 73

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1919, 39, 69

Epichitosaminic acid:

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1918, 36, 77

Nitrous acid, action of
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1918, 36, 91

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1918, 36, 79

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Preparation (LEVENE)

1919, 39, 69

Epichondronic acid:

Preparation (LEVENE)

1916, 26, 150

— from chondrosaminic
acid (LEVENE)

1917, 31, 618

Epichondrosaminic acid:

Nitrous acid, action of
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1918, 36, 92

Synthesis (LEVENE)

1918, 36, 80

Epinephrine:

Acidosis, relation to
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1918, 33, 223

Epinephrine—continued:

Adrenals, content of, under
various experimental
conditions (KURIYAMA)

1918, 34, 299

— — and thyroid feeding
(KURIYAMA)

1918, 33, 207

Alveolar carbon dioxide.
effect on (PETERS and
GEYELIN)

1917, 31, 471

Blood carbon dioxide com-
bining capacity, effect on
(PETERS and GEYELIN)

1917, 31, 471

— catalase, effect on
(STEHLE)

1919, 39, 414

Dextrose content of tissues,
effect on (PALMER)

1917, 30, 92

Epinephrine content of
adrenals, effect on
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1918, 34, 305

Glycogen content of liver,
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1918, 34, 269

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1921, 46, 391

Glycosuria, effect of re-
peated injection of
epinephrine on (KURI-
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1918, 34, 269

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repeated injection of
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YAMA)

1918, 34, 269

Renal threshold for sugar,
effect on (ALLEN and
WISHART)

1920, 43, 141

Epinephrine chloride:

Blood acetone bodies,
effect on (HUBBARD and
WRIGHT)

1921, 49, 385

— composition, effect on
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1921, 46, xiii

β -Hydroxybutyric acid of
blood, effect on (HUB-
BARD and WRIGHT)

1921, 49, 385

Epithelial cell:

Milk content and reaction
(BAKER and BREED)

1920, 43, 230

Epsom salts:

Blood catalase, effect on
(STEHLE)

1919, 39, 416

Erepsin:

Casein, deaminized, di-
gestion of (DUNN and
LEWIS)

1921, 49, 343

—, digestion of (DUNN
and LEWIS)

1921, 49, 343

Pepsin and, proteolysis
with (FRANKEL)

1916, 26, 54

Placenta, human, effect on
(HARDING and YOUNG)

1918, 36, 578

Proteins, digestion of
(FRANKEL)

1916, 26, 39

Eryptase:

Soluble, autolyzed tissue,
presence in (DERNBY)

1918, 35, 194

Erythrocytes:

Autolysis (MORSE)

1921, 46, xlvi

Escholtzia Californica:

Rutin from (SANDO and
BARTLETT)

1920, 41, 495

Esculin:

Lactic acid bacteria, fer-
mentation by (FRED,
PETERSON, and ANDER-
SON)

1921, 48, 397

Esophagus:

Dextrose content (PALMER)

1917, 30, 84

Esterase:

Inactivation of (FALK)

1917, 31, 98

Esters:

Aliphatic, reduction of
(LEVENE and ALLEN)

1916, 27, 443

Hydrolysis of, by sub-
stances formed by the
action of alkali on pro-
teins (HULTON-FRAN-
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Ether:

Anesthesia, acetone bodies
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following (SHORT)

1920, 41, 503, lxviii

—, amino-acid content of
blood serum, effect on
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1916, 27, 45

—, blood sugar, effect on
(McGUIGAN and ROSS)

1917, 31, 539

Carbon dioxide capacity
of blood, effect on
(HENDERSON and HAG-
GARD)

1918, 33, 345

Elodea, effect on (MEDES
and McCLENDON)

1920, 42, 541

Morphine and, blood sugar,
effect on (ROSS)

1918, 34, 335

Ethyl acetoacetate:

Creatinine determination,
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1921, 48, 110

Ethyl alcohol:

Bacillus acetoethylicum,
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ROP, ASHE, and SENIOR)
1919, 39, 1

(ARZBERGER, PETERSON,
and FRED)
1920, 44, 465

Casein, solution of, in
sodium hydroxide, effect
on (ROBERTSON and
MIYAKE)
1916, 26, 129

Esterase, inactivation of,
by (FALK)
1917, 31, 102

Lipase, inactivation of, by
(FALK)
1917, 31, 102

Ethylamine:

Determination by Van
Slyke apparatus (WEBER
and WILSON)
1918, 35, 398

Ethyl 2-butylhexylate:

Preparation (LEVENE and
CRETCHER)
1918, 33, 508

Ethyl 4-butyloctylate:

Preparation (LEVENE and
CRETCHER)
1918, 33, 511

Ethyl hydrogen malonate:

Hydrolysis by liver lipase
(CHRISTMAN and LEWIS)
1921, 47, 501

**2 - Ethylmercapto-4 - diethoxy-
methyl-5 - methyl- 6 - oxypy-
rimidine:**

Preparation (JOHNSON and
CRETCHER)
1916, 26, 110

**2 - Ethylmercapto - 5-methyl - 6-
oxypyrimidine-4-aldehyde:**

Oxime (JOHNSON and
CRETCHER)
1916, 26, 111

**2-Ethylmercapto-5-methyl-6-
oxypyrimidine-4-aldehyde—
continued:**

Phenylhydrazone (JOHNSON
and CRETCHER)

1916, 26, 111

Preparation (JOHNSON and
CRETCHER)

1916, 26, 111

Euglobulin:

Blood content, colostrum,
effect of (HOWE)
1921, 49, 115

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Benzoyl- α -aminocinnamic acid (ANDO)
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FORMULA INDEX

The following index of *new* compounds of known empirical formula is arranged according to Richter's system.

The elements are given in the order C, H, O, N, Cl, Br, I, F, S and P, and the remainder alphabetically.

The compounds are arranged in groups according to the number of carbon atoms (thus C₁ group, C₂ group, etc.); according to the number of other elements besides carbon contained in the molecule (thus C₅ IV indicates that the molecule contains five carbon atoms and four other elements); according to the nature of the elements present in the molecule (given in the above order); and according to the number of atoms of each single element (except carbon) present in the molecule.

Salts are placed with the compounds from which they are derived. The chlorides, bromides, iodides and cyanides of quaternary ammonium bases, however, are registered as group substances.

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$C_7H_{15}O_7N$	Chondrosaminoheptonic acid, copper salt (LEVENE)	1916, 26, 152
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C₈ Group**C₈ II**

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C₈ III

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C₈ IV

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C₈ VI

C₈H₉O₂NBrAsHg 3-Bromoarsanilic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 541

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C₉H₁₈O₂ Ethyl 5-methylhexylate (LEVENE and ALLEN) 1916, 27, 442

7-Methyloctylic acid (LEVENE and ALLEN) 1916, 27, 447

C₉H₁₉O₆ 3,5,6-Trimethylglucose (LEVENE and MEYER) 1921, 48, 244

C₉H₁₉I 7-Methyloctyl iodide (LEVENE and ALLEN) 1916, 27, 448

C₉H₂₀O 7-Methyloctyl alcohol (LEVENE and ALLEN) 1916, 27, 448

C₉ III

C₉H₁₉O₈P 1,2-Monoacetonephosphoric acid glucoside (LEVENE and MEYER) 1921, 48, 238

C₉H₁₉ON 7-Methyloctylic amide (LEVENE and ALLEN) 1916, 27, 447

C₉ IV

C₉H₉O₇AsHg 4-Carboxyphenylarsinic acid mercuric acetate (*p*-Benzarsinic acid mercuric acetate) (RAIZISS, KOLMER, and GAVRON) 1919, 40, 539

C₉H₁₄O₈N₂P Cytidinephosphoric acid, brucine and barium salts (LEVENE) 1919, 39, 77

C₉H₁₄O₈N₂P Urindinphosphoric acid, ammonium, barium, brucine and lead salts (LEVENE) 1918, 33, 233;
1919, 40, 395;
1920, 41, 1

C₁₀ Group**C₁₀ I**

C₁₀H₂₂ 2-Butylhexane (LEVENE and CRETCHER) 1918, 33, 510

C₁₀ II

C₁₀H₁₆O Oil isolated from urine (ANDERSON) 1916, 26, 395, 401, 409

C₁₀H₁₈O₄ 5-Methylhexylmalonic acid (LEVENE and ALLEN) 1916, 27, 446

C₁₀H₂₀O₂ 2-Butylhexylic acid (LEVENE and CRETCHER) 1918, 33, 508

Ethyl 6-methylheptylate (LEVENE and ALLEN) 1916, 27, 452

8-Methylnonylic acid (LEVENE and ALLEN) 1916, 27, 454

C₁₀H₂₁O₆ 3,5,6-Trimethyl methylglucoside (LEVENE and MEYER) 1921, 48, 244

C₁₀H₂₁I 2-Butylhexyl iodide (LEVENE and CRETCHER) 1918, 33, 509

C₁₀H₂₂O 2-Butylhexyl alcohol (LEVENE and CRETCHER) 1918, 33, 509

C₁₀ III

C₁₀H₁₀O₂N₂ *d*-α-Phenylmethylhydantoin (WEST) 1918, 34, 190

C₁₀H₁₂O₃N₂ *d*-α-Phenylureidopropionic acid (WEST) 1918, 34, 189

C₁₀H₁₄O₃N₂ Hydroxypropylproline anhydride (DAKIN) 1920, 44, 524

C₁₀H₁₄O₃N₅ Guanylic acid, brucine salt (LEVENE) 1919, 40, 171

C₁₀H₂₁O₈P 3,5,6-Trimethyl-2-phosphoric acid methyl glucoside (LEVENE and MEYER) 1921, 48, 245

C₁₀ IV

C₁₀H₁₆O₃N₂S 2-Thio-4-diethoxymethyl-5-methyl-6-oxypyrimidine (JOHNSON and CRETCHER) 1916, 26, 108

C₁₀H₁₇O₁₂N₃P₂ Hexocytidindiphosphoric acid, barium and brucine salts (LEVENE) 1921, 48, 123

C₁₀ VI

C₁₀H₉O₈NBrAsHg 3-Bromooxalylarsanilic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 541

C₁₁ Group**C₁₁ II**

- C₁₁H₂₀O₄** Dibutylmalonic acid (LEVENE and CRETCHER)
1918, 33, 507
- C₁₁H₂₀O₅** Ethyl α -methyl- γ,γ -diethoxyacetoacetate (JOHNSON
and CRETCHER) 1916, 26, 107
6-Methylheptylmalonic acid (LEVENE and ALLEN)
1916, 27, 453
- C₁₁H₂₂O₂** Ethyl 7-methyloctylate (LEVENE and ALLEN)
1916, 27, 447

C₁₁ III

- C₁₁H₁₀O₄N₂** Antiphenylhydantoinhydroxyacetic acid (DAKIN)
1921, 48, 287
Paraphenylhydantoinhydroxyacetic acid (DAKIN)
1921, 48, 284
- C₁₁H₁₁ON₃** Oil from urine, semicarbazone (ANDERSON)
1916, 26, 393, 401

C₁₁ IV

- C₁₁H₁₀O₃NI₃** Thyroxin, ammonium, barium, calcium, copper,
magnesium, nickel, potassium and zinc salts, hydro-
chloride and sulfate (KENDALL and OSTERBERG)
1919, 40, 314
- C₁₁H₁₈O₁₃N₂P₂** Hexothymidindiphosphoric acid, barium and bru-
cine salts (LEVENE) 1921, 48, 123

C₁₂ Group**C₁₂ II**

- C₁₂H₂₂O₄** 7-Methyloctylmalonic acid (LEVENE and ALLEN)
1916, 27, 449
- C₁₂H₂₂O₆** 3,5,6-Trimethyl-1,2-acetoneglucose (LEVENE and
MEYER) 1921, 48, 243
- C₁₂H₂₄O₂** 4-Butyloctylic acid (LEVENE and CRETCHER)
1918, 33, 511
Ethyl 2-butyloctylate (LEVENE and CRETCHER)
1918, 33, 508
- C₁₂H₂₅I** 4-Butyloctyl iodide (LEVENE and CRETCHER)
1918, 33, 511
- C₁₂H₂₆O** 4-Butyloctyl alcohol (LEVENE and CRETCHER)
1918, 33, 511

C₁₂ III

- C₁₂H₁₁O₂N₃** 2,6-Dioxy-5-methylpyrimidine-4-aldehyde anil (JOHNSON and CRETCHER) 1916, 26, 113
C₁₂H₁₄O₄N₂ Hippuryl-β-alanine (BAUMANN and INGVALDSEN) 1918, 35, 276
C₁₂H₁₇O₂N 3-Methylbutyl phenylurethane (LEVENE and ALLEN) 1916, 27, 440
C₁₂H₂₁O₅P 1,2,3,5-Diacetone-6-phosphoric acid glucoside (LEVENE and MEYER) 1921, 48, 237

C₁₂ IV

- C₁₂H₁₁ON₃S** 2-Thio-5-methyl-6-oxypyrimidine-4-aldehyde anil (JOHNSON and CRETCHER) 1916, 26, 110
C₁₂H₁₁O₃N₂I₃ Thyroxin ureide (KENDALL and OSTERBERG) 1919, 40, 327
C₁₂H₂₁O₃N₂S 2-Ethylmercapto-4-diethoxymethyl-5-methyl-6-oxypyrimidine (JOHNSON and CRETCHER) 1916, 26, 110

C₁₂ V

- C₁₂H₁₅O₃N₂AsHg** Diacetyl-3,5-diamino-4-hydroxyphenylarsinic acid mercuric acetate (RAIZISS, KOLMER, and GAVRON) 1919, 40, 540

C₁₃ Group**C₁₃ II**

- C₁₃H₂₄O₄** 2-Butylhexylmalonic acid (LEVENE and CRETCHER) 1918, 33, 510
 Ethyl 4-methylpentylmalonate (LEVENE and ALLEN) 1916, 27, 451

C₁₃ III

- C₁₃H₁₆O₅N₂** Sedoheptose osone o-phenylenediamine compound (LA FORGE and HUDSON) 1917, 30, 67
C₁₃H₁₉O₂N 4-Methylpentyl phenylurethane (LEVENE and ALLEN) 1916, 27, 451

C₁₃ IV

- C₁₃H₁₂O₄NI₃** Thyroxin acetate, sulfate, ammonium, barium, calcium, potassium, sodium, and silver salts (KENDALL and OSTERBERG) 1919, 40, 323
C₁₃H₁₆O₅NCl Benzal d-l-xylohexosaminic acid lactone hydrochloride (LEVENE) 1918, 36, 86

$C_{13}H_{19}O_6N_2Br$	<i>d</i> -Mannoaldoheptose (LA FORGE)	<i>p</i> -bromophenylhydrazone 1916–1917, 28, 522
	<i>d</i> -Mannoketoheptose (LA FORGE)	<i>p</i> -bromophenylhydrazone 1916–1917, 28, 518

C₁₄ Group**C₁₄ II**

$C_{14}H_{26}O_4$	Ethyl 5-methylhexylmalonate (LEVENE and ALLEN)	1916, 27, 446
$C_{14}H_{28}O_2$	Ethyl 4-butyloctylate (LEVENE and CRETCHER)	1918, 33, 511

C₁₄ III

$C_{14}H_{12}O_2N_2$	<i>d</i> - α -Naphthylmethylhydantoin (WEST)	1918, 34, 191
	<i>dl</i> - α -Naphthylmethylhydantoin (WEST)	1918, 34, 190
$C_{14}H_{14}O_3N_2$	<i>d</i> - α -Naphthylureidopropionic acid (WEST)	1918, 34, 191
$C_{14}H_{21}O_2N$	<i>n</i> -Heptyl phenylurethane (LEVENE and TAYLOR)	1918, 35, 283
	5-Methylhexyl phenylurethane (LEVENE and ALLEN)	1916, 27, 446

C₁₅ Group**C₁₅ II**

$C_{15}H_{28}O_4$	Diethyl dibutylmalonate (LEVENE and CRETCHER)	1918, 33, 507
	Ethyl 6-methylheptylmalonate (LEVENE and ALLEN)	1916, 27, 453

C₁₅ III

$C_{15}H_{23}O_2N$	6-Methylheptyl phenylurethane (LEVENE and ALLEN)	1916, 27, 453
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C₁₆ Group**C₁₆ II**

$C_{16}H_{30}O_4$	Ethyl 7-methyloctylmalonate (LEVENE and ALLEN)	1916, 27, 448
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C₁₆ III

$C_{16}H_{14}O_3N_2$	Phenylaminomalic acid anil (DAKIN)	1921, 48, 290
$C_{16}H_{22}O_{10}P$	1,2-Monoacetone-6-benzoyl phosphoric acid glucoside (LEVENE and MEYER)	1921, 48, 239
$C_{16}H_{25}O_2N$	7-Methyloctyl phenylurethane (LEVENE and ALLEN)	1916, 27, 448

C₁₆ IV

C₁₆H₁₅O₄N₃S α -Naphthalenesulfonylhistidine (BAUMANN and
INGVALDSEN) 1918, 35, 275

C₁₇ Group

C₁₇ II

C₁₇H₃₂O₄ Diethyl 2-butylhexylmalonate (LEVENE and CRET-
CHER) 1918, 33, 510

C₁₈ Group

C₁₈ III

C₁₈H₁₇O₄N Cinnamoyltyrosine (ANDO) 1919, 38, 9

C₁₈H₂₀O₈N₂ Benzeneazophenol glucuronate (SALANT and BENGIS)
1916, 27, 408

C₁₈H₂₀O₉N₂ Benzeneazoresorcinol glucuronate (SALANT and
BENGIS) 1916, 27, 407

C₁₈H₂₄O₄N₄ Xylohexosamine osazone (LEVENE)
1916, 26, 160

C₁₉ Group

C₁₉ III

C₁₉H₂₄O₅N₄ Sedoheptose phenylosazone (LA FORGE and HUDSON)
1917, 30, 65

C₁₉H₂₄O₆N₂ *d*-Mannoketoheptose phenylosazone (LA FORGE)
1916-1917, 28, 520

C₁₉ IV

C₁₉H₂₂O₅N₄Br₂ Sedoheptose *p*-bromophenyl osazone (LA FORGE
and HUDSON) 1917, 30, 66

C₂₀ Group

C₂₀ III

C₂₀H₂₁O₄N Cinnamoyltyrosine ester (ANDO) 1919, 38, 8

C₂₁ Group

C₂₁ II

C₂₁H₂₀O₆ Dibenzalanhydrosedoheptose (LA FORGE and HUDSON)
1917, 30, 72

C₂₁ III

C₂₁H₂₂N₄O₈ *p*-Nitrophenacornithinic acid (SHERWIN and HEL-
FAND) 1919, 40, 25

C₂₂ Group**C₂₂ III**

C₂₂H₂₁O₂N₂ Phenylaminomalic acid dianilide (DAKIN)
1921, 48, 290

C₂₂ IV

C₂₂H₂₅O₆NCl Dibenzaldextro-*d*-ribohexosaminic ethyl ester hydrochloride (LEVENE and CLARK)
1921, 46, 30

C₂₆ Group**C₂₆ IV**

C₂₆H₂₅O₈N₂S₂ α -Naphthalenesulfonylhistidine naphthalenesulfonate (BAUMANN and INGVALDSEN)
1918, 35, 274

C₂₈ Group**C₂₈ II**

C₂₈H₂₈O₇ Tribenzal- α -sedoheptitol (LA FORGE and HUDSON)
1917, 30, 69
Tribenzal- β -sedoheptitol (LA FORGE and HUDSON)
1917, 30, 70

C₃₀ Group**C₃₀ II**

C₃₀H₄₈O₂ Mycosterol and digotinin compound (IKEGUCHI)
1919, 40, 177
C₃₀H₄₈O₃ Hydroxymycosterol (IKEGUCHI)
1919, 40, 180

C₃₂ Group**C₃₂ II**

C₃₂H₅₀O₃ Mycosterol acetate (IKEGUCHI)
1919, 40, 179

C₃₆ Group**C₃₆ II**

C₃₆H₅₄O₆ Hydroxymycosterol acetate (IKEGUCHI)
1919, 40, 181

C₃₆ III

C₃₆H₃₃O₁₀N Pentabenzoylxylohexosamine (LEVENE)
1916, 26, 159

C₅₇ Group

C₅₇ III

C₅₇H₁₀₁O₁₂N Acetylcerasin (LEVENE and WEST) 1917, 31, 64

C₆₀ Group

C₆₀ III

C₆₀H₁₀₅O₁₂N Acetylphrenosin (LEVENE and WEST) 1917, 31, 642

C₆₆ Group

C₆₆ III

C₆₆H₁₀₂O₂₂N₄ *p*-Nitrobenzoylphrenosin (LEVENE and WEST) 1917, 31, 647

C₆₆H₁₀₅O₁₂N Benzoylphrenosin (LEVENE and WEST) 1917, 31, 644

C₇₅ Group

C₇₅ III

C₇₅H₁₁₁O₁₂N Cinnamoylphrenosin (LEVENE and WEST) 1917, 31, 646

SUGGESTIONS FOR THE PREPARATION OF MANUSCRIPTS.

COPY.

All manuscripts should be copied with triple spacing and 1½ inch margins.

The original typewritten copy should be submitted for publication, not a carbon copy. It should be sent flat, not rolled or folded. All corrections on the manuscript should be clearly written in ink. Manuscripts should be consistent in style; a word should not be abbreviated in one line and written out a few lines below.

TITLE.

The title, author's name, and laboratory where the work was done should appear as the heading of the paper, followed by the words: Received for publication, —, —. The title, etc., should be written on a separate sheet.

An abbreviated form of the title, not exceeding thirty-six letters in length, to be used as a running headline, should be given, also on a separate sheet.

HEADINGS.

Major headings, such as INTRODUCTION, EXPERIMENTAL, DISCUSSION, SUMMARY, CONCLUSION, BIBLIOGRAPHY, also TABLE in table headings, are printed in small capitals, and therefore should be underlined twice.

Minor headings, whether center or side, and descriptive matter in table headings, are printed in italics, and therefore underlined once in the manuscript. Capitalize the nouns, adjectives, pronouns, verbs, Cc., Gm., Per Cent, etc.

Dates are not underlined, except when they occur in an italicized heading.

The form Sept. 15, 1915, is preferred to IX-15-15

TEXT.

Begin every experiment, table, or quotation of over five lines on a new sheet. When the text is resumed start with another fresh sheet. This method brings the material of the entire manuscript (except foot-notes, etc.) in sequence, but permits, without mutilation of the manuscript, the separation in the Printer's office of tables, etc., which are set up separately.

Number the sheets consecutively throughout. Mark in ink the place for each illustration.

TABLES.

The form for table headings has already been given under "HEADINGS." Table column headings are written in small letters and followed by periods (see Table I).

Words like *gm.*, *cc.*, *per cent*, $^{\circ}\text{C.}$, etc., referring to an entire column in a table, are written in small letters at the top of the column, and underlined once.

In tables use ditto marks for words when possible, but not for figures.

TABLE I.

Changes in the Blood of Rabbit 1 after Hemorrhage.

Date.	Amount of blood re- moved.	Hemo- globin.	Red blood corpuscles.	Remarks.
<i>1915</i>	<i>cc.</i>	<i>per cent</i>		
Sept. 13	10	89	5, 160, 000	Weight 1,605 gm.
" 14	10	68	2, 870, 000	No nucleated red cells.
" 15	10	75	3, 990, 000	" " " "
" 16	10	58	3, 070, 000	" " " "

FOOT-NOTES.

Foot-Notes to Text.—Typewrite all foot-notes together at the end of the paper and number them consecutively from 1 up, to correspond with the reference numbers in the text.

Number all foot-note references consecutively throughout the paper; *i.e.*, if the foot-note references on the first page are 1, 2, 3, those on the second page should be 4, 5, 6, etc. Superior numerals (located as ¹, ², ³) should be used in the text to indicate foot-notes.

Double spacing should be used in typewriting foot-notes.

Foot-Notes to Tables.—For foot-notes to tables the following symbols are used (*, †, ‡, etc.), not numbered, in order to distinguish them from foot-notes to text.

REFERENCES.

References are usually printed in the form of foot-notes, and as such are numbered and located with the other foot-notes. If a given article is referred to more than once, the foot-note is printed only with the first reference. The number of the foot-note is repeated at subsequent points in the text where the same article is referred to. Do not use *loc. cit.*

If the author prefers, the references may be printed in a bibliography at the end of the paper. In this case one of two systems is usually adopted: (a) The references in the bibliography are arranged and numbered in the order of their appearance in the text and independently of the foot-notes. (b) They are arranged alphabetically according to the names of the authors. In this case the text reference is the name of the author followed by the year of the publication referred to. If more than one article by the same author in a given year is referred to, the letters *a*, *b*, *c*, etc., may be used to differentiate them. This system is convenient because, among other reasons, of the ease with which new references can be inserted in the manuscript, and of the readiness with which a given reference can be located in the printed bibliography.

Text references to a bibliography are indicated by numbers in parentheses instead of the superior numbers used for foot-notes. Thus "Ehrlich¹" indicates a foot-note; but "Ehrlich (1)" or "Ehrlich (1910, *a*)" or "(Ehrlich, 1910, *a*)" indicates a reference in the bibliography. Two separate series of numbers can thus be used in the same text to indicate respectively foot-notes and references in the bibliography.

The form for references is indicated by the following example,

the order of data being: author, initials, journal (underlined), year, volume (small Roman numerals), and page:

* Fisher, E., *Ber. chem. Ges.*, 1889, xxii, 87.

The abbreviations used by the *Journal* for the most commonly cited publications are listed below.

<i>Am. Chem. J.</i>	<i>Ergebn. allg. Path. u. path. Anat.</i>
<i>Am. J. Physiol.</i>	<i>Gazz. chim. ital.</i>
<i>Ann. chim. phys.</i>	<i>J. Agric. Research.</i>
<i>Ann. Chem.</i>	<i>J. Am. Chem. Soc.</i>
<i>Arch. ges. Physiol.</i>	<i>J. Am. Med. Assn.</i>
<i>Arch. exp. Path. u. Pharmakol.</i>	<i>J. Biol. Chem.</i>
<i>Arch. Int. Med.</i>	<i>J. Chem. Soc.</i>
[Arkansas] Agric. Exp. Station,	<i>J. Exp. Med.</i>
<i>Bull.</i> [5, 1915].	<i>J. prakt. Chem.</i>
<i>Ber. chem. Ges.</i>	<i>J. Ind. and Eng. Chem.</i>
<i>Berl. klin. Woch.</i>	<i>J. Physiol.</i>
<i>Biochem. J.</i>	<i>J. Russ. Phys. Chem. Soc.</i>
<i>Biochem. Z.</i>	<i>Monatsh. Chem.</i>
<i>Bull. Hyg. Lab., U. S. P. H.</i>	<i>Proc. Roy. Soc. London, Series [B].</i>
<i>Bull. Soc. chim.</i>	<i>Proc. Soc. Exp. Biol. and Med.</i>
<i>Carnegie Inst. Washington, Pub.</i>	<i>Rec. trav. chim. Pays-Bas.</i>
No. [156, 1911].	<i>U. S. Dept. of [Agric.], Bureau of</i>
<i>Chem. Abstr.</i>	[Plant Industry], <i>Bull.</i> [31, 1914].
<i>Chem. Zentr.</i>	<i>Z. physik. Chem.</i>
<i>Compt. rend. Acad.</i>	<i>Z. physiol. Chem.</i>

In order to distinguish books from periodicals, titles of books are not underlined. The place of publication, the year, and the page should be given, and the edition when there is more than one.

References to books and journals should not be inserted in the text.

EXPLANATION OF FIGURES.

Typewrite explanations of the figures, whether for plates or text-figures, and number them to correspond with the figures to which they refer. The Bibliography precedes the Explanation of Figures.

FORMS AND ABBREVIATIONS.

Gram = gm.	10 millimolecular = 10.0 mM
Cubic centimeter = cc.	per cent (without a period).
Centimeter = cm.	a.m., p.m. (lower case).
Millimeter = mm.	In both large and small type
Milligram = mg.	write 30 cc., 20 mg., 20 gm.
Kilogram = kilo or kg.	Always write 0.25; <i>i.e.</i> , with a
Tenth normal = 0.1 N	zero before the decimal point.
Tenth molecular = 0.1 M	

Use the form 193–194.5°, placing the degree mark at the end only.

Use $[\alpha]_D^{20}$ for specific rotation (for 20° and sodium light). The values for $[\alpha]$ are best expressed in the following way:

$$[\alpha]_D^{20} = \frac{-0.25^\circ \times 2.1662}{1 \times 0.1505} = -3.58^\circ$$

For normal and molecular solutions the expressions 2.5 N and 0.5 M are preferred to $2\frac{1}{2}$ N and $\frac{M}{2}$. In exceptional cases, however, as $3/16$ M, the fractional form is more convenient.

Hydrated salts should be written as $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$.

Small numbers in the text are usually written out, large numbers expressed in numerals; thus seven, but 250.

In numbers of four figures or over use commas; as 1,000, 10,000.

SPELLING.

Words like hemorrhage, anesthetic, etc., are spelled with *e* (not *ae*).

Use *f* instead of *ph* for sulfur and sulfur derivatives.

Words serving as special names of definite objects, such as, Experiment 8, Table I, Rabbit 1, are written with capital letters.

NOMENCLATURE.

The usage of the American Chemical Society is followed. The following rules cover most of the terms used in this *Journal*.

Hydroxyl derivatives of hydrocarbons are to be given names

ending in *-ol*; as *glycerol*, *cholesterol*, *pinacol* (not *pinacone*). This applies also to alcohols of the sugar series; as *mannitol*, *heptitol*, etc.

Compounds which are not alcohols but have received names ending in *-ol* should be spelled *-ole*; as *anisole*, *indole*. (German hydrocarbon names, as *Benzol*, *Toluol*, etc., are to be written *benezene*, *toluene*, etc.)

Hydroxy- and not oxy- should be used in designating a hydroxyl compound; as *hydroryacetic acid*, $\text{CH}_2(\text{OH})\text{CO}_2\text{H}$, (not *oryacetic acid*).

As regards the endings *-in* and *-ine*, the latter should always be used for *basic* substances, and for them only; *-in* is used for glycerides, glucosides, bitter principles, proteins, etc.; thus *aniline*, *tyrosine*, *purine*, *morphine*; but *gelatin*, *palmitin*, *amygdalin*, *albumin*, *protein* (not *proteid*).

When a substituent is one of the groups NH_2 , NHR , NR_2 , NH , or NR , its name should end in *-ino*; thus $\text{NH}_2\text{CH}_2\text{CH}_2\text{CO}_2\text{H}$, β -*aminopropionic acid* (not *amidopropionic acid*); $\text{C}_6\text{H}_5\text{NHCH}_2\text{CH}_2\text{CO}_2\text{H}$, β -*anilinopropionic acid*; $\text{CH}_3\text{CH}_2\text{NH}_2\text{CO}_2\text{H}$, α -*aminopropionic acid*.

The term ether must not be used for compounds which are properly called esters. Esters and metallic salts should be designated in the form, diethyl phthalate, methyl hydrogen succinate, sodium propionate, etc. (not as the diethyl ester of phthalic acid, the monomethyl ester of succinic acid, or the sodium salt of propionic acid).

Acid radicals, such as $\text{C}_6\text{H}_5\text{CO}$, must have names ending in *-yl*, and their compounds with halogens, as $\text{C}_6\text{H}_5\text{COCl}$, are to be termed chlorides, bromides, etc. Thus, *benzoyl chloride* (not chloride of benzoic acid or benzoic acid chloride).

The connective *o* is to be used in such combining forms as *amino-*, *bromo-*, *chloro-*, *cyano-*, and *iodo-*; thus *bromobenzene*, *chloroacetic*, *nitroaniline*. A few exceptions to this rule are permitted on account of long established usage; as *acetamide*, *cyanamide*.

Substances containing the group SO_3H should, if possible, be called sulfonic acids; failing this, sulfo compounds; thus *phenylsulfonic acid*, $\text{C}_6\text{H}_5\text{SO}_3\text{H}$, and *sulfobenzoic acid*, $\text{HO}_2\text{CC}_6\text{H}_4\text{SO}_3\text{H}$.

Salts of organic bases with hydrochloric acid should be called hydrochlorides (not hydrochlorates or chlorhydrates).

Salts of chloroplatinic acid are called chloroplatinates (not platinichlorides), and the formulas should be written in the form $(\text{CH}_3\text{NH}_2)_2\text{H}_2\text{PtCl}_6$. Salts of thiocyanic acid, HCNS, should be called thiocyanates. Use sodium thiosulfate for $\text{Na}_2\text{S}_2\text{O}_3$.

The word hydroxide should be used for a compound with OH, and hydrate for a compound with H_2O ; thus, chlorine hydrate, $\text{Cl}_2 \cdot 10\text{H}_2\text{O}$; barium hydroxide, $\text{Ba}(\text{OH})_2$.

Greek letters should be indicated by Gk. on the margin of the manuscript.

The following letters are italicized and should be underlined: *o-*, *m-*, *p-*, *d-*, and *l-*, for ortho, meta, para, dextro, and levo.

Use *dl-* (not *r-*) for racemic.

CHARTS.

Ink.—Charts should be drawn with black ink.¹ Blue-black ink and typewriting do not make good reproductions.

Paper.—Charts should be drawn on paper with a smooth surface. The cross-barred paper on page 437 is satisfactory for this purpose, as the blue lines do not reproduce. When it is desired to reproduce the finer lines, the blue lines may be inked in or the green-lined coordinate paper similar to the sample on page 11 may be used. The green lines reproduce and appear as black lines.

Reduction.—Charts should be drawn large enough to stand a reduction of one-half or one-third. The amount of reduction must be taken into consideration when the chart is drawn, and the lines must be heavy enough, and the letters large enough to make clear reproductions when reduced. Letters and numbers should, when reduced, be not less than 2 mm. in height. The outside measurements for charts when reduced, including the legend, are 4 x 6½ inches. Authors must determine whether the chart is to be printed the long or the short way on the page.

Margin.—A margin of at least half an inch should be left around the chart.

The sample charts show the original size of the chart and the chart reduced to fit the page of the *Journal*.

¹ Higgins' waterproof India ink.

DRAWINGS.

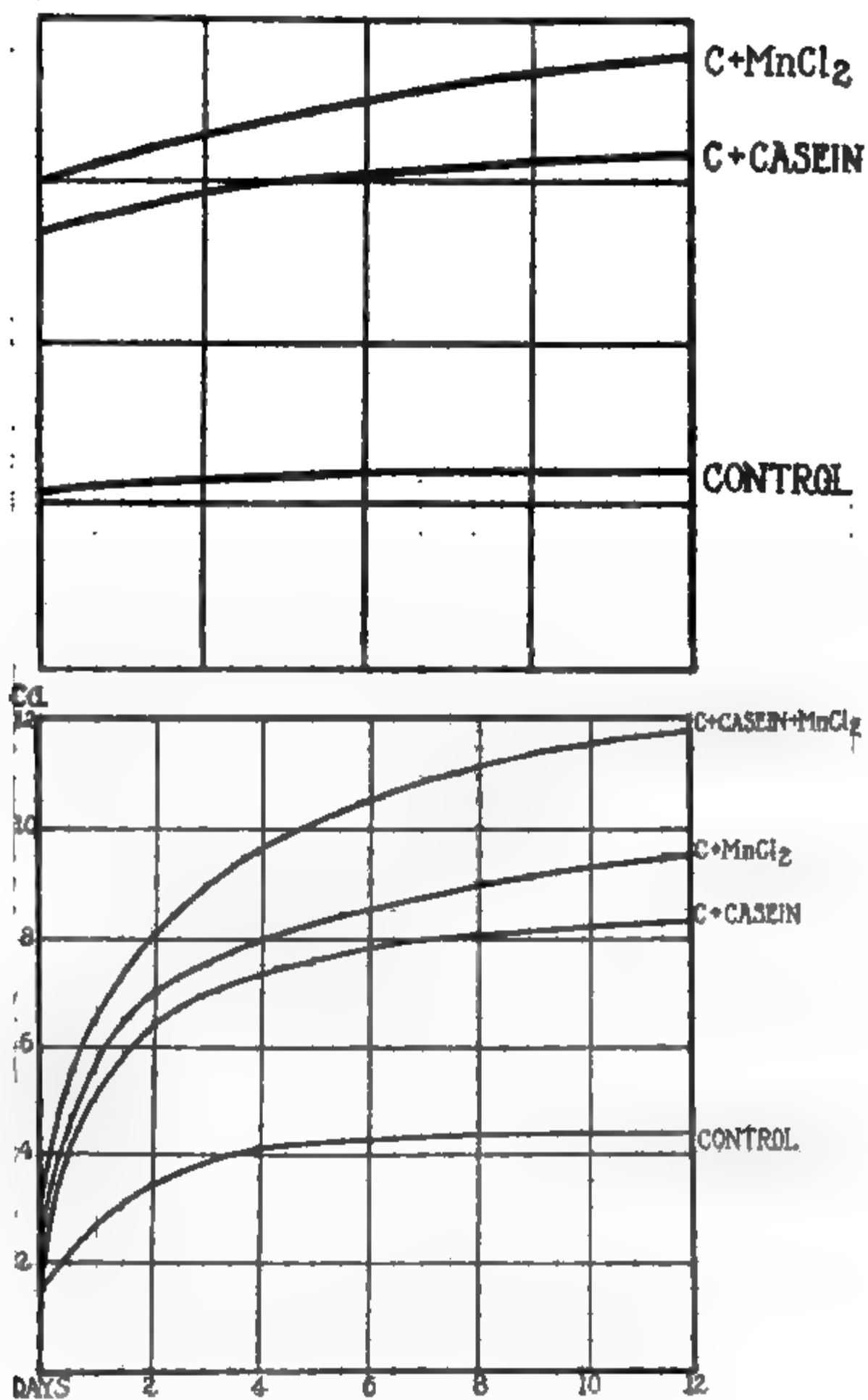
The above remarks concerning ink, pen, and paper apply also to drawings.

PHOTOGRAPHS

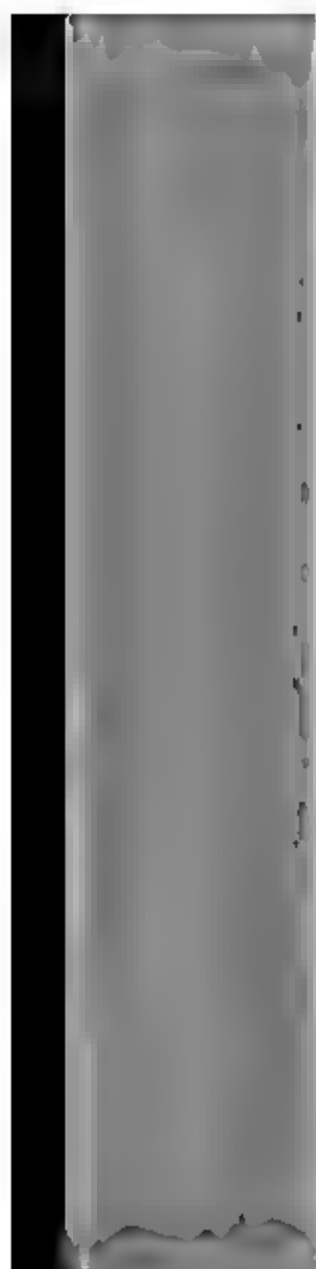
Photographs should be carefully trimmed so that two or more are to appear on the same page when mounted together, and the size to which they are reduced must be considered.

Authors who have not the facilities for making their own as described above should send them unmounted. The part to be reproduced should be marked on the front or the back of the photograph, with an arrow. The top should always be indicated in case of doubt as to which way the figure should be mounted.

Figures should be numbered consecutively, and they are referred to in the text.

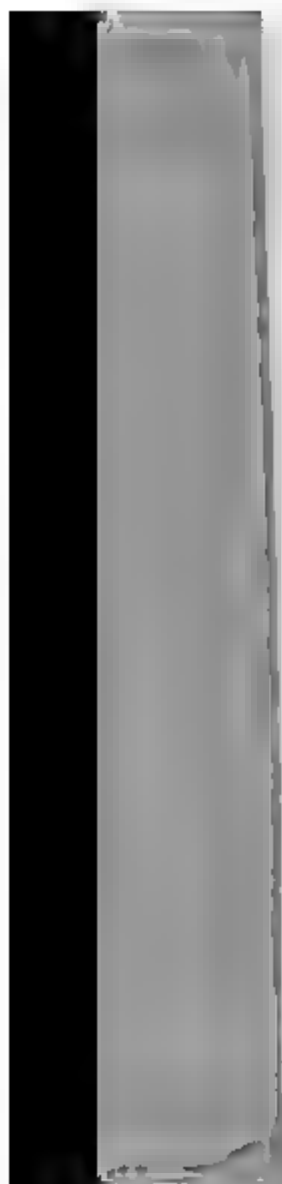


The lower chart shows the effect of reducing the upper chart to two-thirds of the original scale. The letters below are 2 mm. high.



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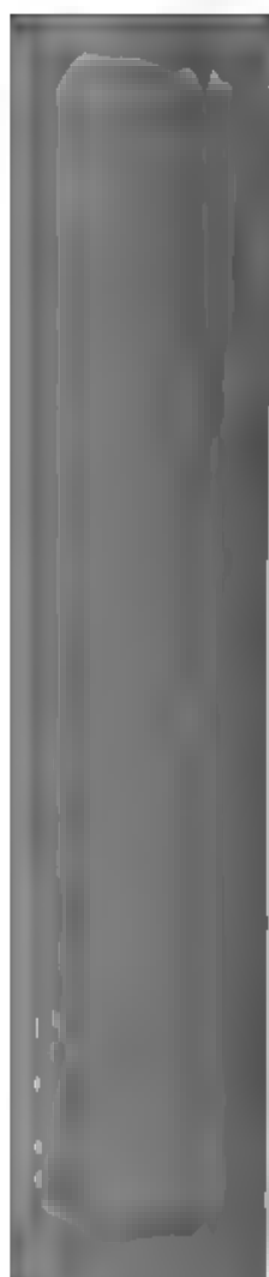
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